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JOHN DEWEY'S CONCEPT OF WORK AND EDUCATIONAL IMPLICATIONS

by

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A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

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UNIVERSITY OF ALBERTA  
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The undersigned certify that they have read,  
and recommend to the Faculty of Graduate Studies for  
acceptance, a thesis entitled "John Dewey's Concept  
of Work and Educational Implications," submitted by  
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requirements for the degree of Master of Education.







## ABSTRACT

The purpose of this thesis is to determine John Dewey's concept of work and its educational implications. Other larger concepts which are essential to understand his theory of work are also developed. This topic is presented within the context of his broader philosophical viewpoint.

The study begins with Dewey's critique of the Greek concept of work. In the process of evaluating and criticizing the Greek view, Dewey presents his negative view of work, i.e., what he rejects in the traditional view of work.

According to Dewey the formal Greek view of work merely reflects accepted social customs. The accepted social arrangement set the leisure or ruling class in opposition to the laboring class. This opposition is extended to Greek epistemology and to their metaphysics. Dewey shows the unfortunate results of this Greek philosophy. He is especially concerned about its influence upon their science. By refusing to give the instrumentalities and procedures of workers their proper place in the Greek philosophical scheme, the Greeks were unable to develop a science as Dewey understands it.

In developing his positive view of work, it is noted at the outset that work is closely related to science chiefly in the fact that historically work provided the model from which science developed. Both work and science are related to intelligence. Work is a primary manifestation of intelligence, but science provides the fullest and most fruitful use of intelligence.





Work as a vital human activity occupies much of Dewey's attention in his educational theory. Work is viewed as part of a continuum of active occupations. Work, play and art are all parts of this continuum, but work is the central concept in this continuum. Play is defined as an activity which is its own end, yet it has a directing idea or end which permits one play activity to flow into another. Work is an activity directed by some end-in-view. This remoter end in time demands greater exercise of intelligence. Art is an activity which is nothing more than work permeated with play.

Work activities in education are important because they initiate students into the method of science. Those work activities which demand the use of intelligence in solving problems are best suited to education because they not only initiate the learner into the rudiments of science but also provide him with the opportunity to engage in a cooperative type activity which promotes the interests of democracy.

The fifth chapter shows how Dewey's concept of work functions in industry. Dewey traces the evils of industrial life to the arrangement of social institutions. Economic and industrial institutions operate on the premise that man is in opposition to nature. This view makes work a burden and not a joy to man. Work becomes feudal in this sense.

Dewey proposes that a distinctive and a humane culture can only arise out of man's dominant mode of activity: for his day and nation industrial activity was that dominant mode. Work then is to be a culturing feature in society. In doing this nature would become an





ally to man, not his enemy. In order to fully realize this goal the worker must share in the control of industry. The incentive system must also be reshaped so that men do not work for money alone; their work activities should be viewed as an important means in the creating of a distinctive culture.

Education has a most important role in reshaping industrial institutions so that work can become cultural. The school's task is to provide the youth with the directive power sufficient to reshape working conditions in the adult world. Since intelligence is best exercised and developed within human activities, Dewey proposes that the school curriculum have as its axis of orientation socially useful occupations.

The concluding portion of this thesis has two distinct aspects. In the first section a critical analysis of Dewey's viewpoint is set forth. The second part analyzes one particular educational program in Canada in terms of Dewey's concept of work and its educational implications. The particular program discussed is the one which the federal government initiated with the adoption of the "Technical and Vocational Training and Assistance Act, Bill C-49" in December, 1960. In general, it is found that Dewey would be critical of this program because it does not promote the best interests of the worker in a democratic nation.





## ACKNOWLEDGEMENTS

I would like to express my indebtedness to the members of my thesis committee, Professors L. F. Troutner, M. R. Lupul and A. M. Mardiros, for their efforts in guiding me toward the final completion of this thesis. In part the constructive criticism of Dr. L. F. Troutner was of great help in this challenging task of probing in depth a single aspect of a very complex philosophy.





## TABLE OF CONTENTS

CHAPTER		PAGE
I.	INTRODUCTION . . . . .	1
	Origin of the Study . . . . .	1
	Research . . . . .	2
II.	DEWEY'S CRITIQUE OF THE GREEK CONCEPT OF WORK . . . . .	5
	Dualisms in the Greek View of Man and Society . . . . .	7
	Dualisms in Greek Educational Philosophy . . . . .	10
	Dualisms in Greek Epistemology and Metaphysics . . . . .	13
	Dewey's Criticisms of These Dualisms . . . . .	17
	The Influence of Greek Dualisms . . . . .	20
III.	WORK, SCIENCE AND INTELLIGENCE . . . . .	25
	Work . . . . .	28
	Science . . . . .	32
	Work and Science . . . . .	33
	Intelligence and Science and Work . . . . .	37
IV.	WORK, PLAY AND ART IN EDUCATION . . . . .	44
	Play . . . . .	47
	Work . . . . .	51
	Art . . . . .	55
	Work, Play and Art Related . . . . .	56
	Educational Implications of Dewey's	
	Concept of Work . . . . .	57





CHAPTER	PAGE
V. WORK--CULTURAL OR FEUDAL? . . . . .	72
An Evaluation of Industrial Life . . . . .	74
The Role of Education in Making Work Cultural . . . . .	88
VI. EVALUATION . . . . .	98
Dewey and Canadian Vocational Education . . . . .	98
A Critical Analysis of Dewey's Concept of Work . . . . .	104
BIBLIOGRAPHY . . . . .	113





## CHAPTER I

### INTRODUCTION

#### Origin of the Study

My interest in the distinctions between a liberal and a vocational type of education was stimulated as the result of a course in educational philosophy taught by Professor John MacDonald at the University of Alberta. The problems involved in defining both a liberal and a vocational type of education became a matter of concern to me at this time. Both the lectures and the assigned research project dealt with these considerations in such a fashion that I was motivated to study further into this matter. Since John Dewey's theory of work seemed to be relevant to some of the issues involved in this distinction, I decided for purposes of clarification and understanding to make an analysis of his conception of work, particularly, in so far as it relates to education.

I was further motivated to pursue this topic by a desire to know more thoroughly John Dewey's philosophical position. His perspective of work seemed closely related to his philosophy; therefore, the inquiry promised to be fruitful in this regard.

The general relevance of this investigation to understanding current educational theories and practices was another consideration. The importance which the Soviet Union places upon "labor" in its current educational program indicates in particular the relevancy of



this thesis.<sup>1</sup> Although the thesis does not deal with Soviet educational viewpoints and practices, it does provide a basis for some future comparative study.

### Research

Certain difficulties were encountered in the process of determining Dewey's conception of work and its educational implications. Since his theory of work is closely tied in with his general philosophical position, it was imperative to relate this conception to his overall perspective. Other problems of research arose because his concept of work is sprinkled throughout his many writings; he has not written any one book or article where he develops this topic. Several of Dewey's writings are however more basic than others to gain an understanding of this theory. They are as follows: Democracy and Education,<sup>2</sup> Experience and Nature,<sup>3</sup> Individualism Old and New,<sup>4</sup> and The Quest For Certainty.<sup>5</sup> It must be further noted that even these prime sources do not completely and adequately set forth his concept of work. For

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<sup>1</sup>William R. Fraser, "The Traditional and the Distinctive in Soviet Education," Edmund J. King, (ed.) Communist Education (Indianapolis: The Bobs-Merrill Company, Inc., 1963), pp. 78 - 96.

<sup>2</sup>John Dewey, Democracy and Education (New York: The Macmillan Company, 1961), 378 pp.

<sup>3</sup>John Dewey, Experience and Nature (New York: Dover Publications Inc., 1958), 443 pp.

<sup>4</sup>John Dewey, Individualism, Old and New (New York: Capricorn Books, 1929), 171 pp.

<sup>5</sup>John Dewey, The Quest For Certainty: A Study of The Relation of Knowledge and Action (New York: Capricorn Books, 1960), 318 pp.





example, it is only in Logic: The Theory of Inquiry that Dewey explicitly states and develops the idea that historically work provided the model for the development of science.<sup>6</sup>

John W. Donohue, S. J. is the only person, to the best of my knowledge, who has written to any significant extent on Dewey's concept of work.<sup>7</sup> The main purpose of this book, Work and Education, seems to be to develop a Christian perspective of work. The author briefly develops the viewpoint of Karl Marx, John Dewey, and several other scholars. These viewpoints, in a general way, are then compared with this Christian perspective. Donohue's description of Dewey's concept of labor was especially helpful. The most important and useful portion of this exposition was his identification and development of Dewey's view of active occupations as a continuum. This idea of a continuum to characterize active occupations was never explicitly developed by Dewey, but the notion of a continuum seems implicit when Dewey sets forth his idea of active occupations. Full recognition of the value of this idea will be evident in Chapter IV of this inquiry, "Work, Play and Art in Education."

This thesis is a study in depth of one concept involved in Dewey's philosophical and educational position. A number of other larger

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<sup>6</sup>John Dewey, Logic: The Theory of Inquiry (New York: Henry Holt and Company, 1938), p. 94.

<sup>7</sup>John W. Donohue, S. J., Work and Education: The Role of Technical Culture in Some Distinctive Theories of Humanism (Chicago: Loyola University Press, 1959), 238 pp.





concepts such as science, intelligence, play, and art are closely related and essential to the understanding of his theory of work. Before analyzing any of these larger concepts, however, his views on the Greek perspective of work should prove helpful as a starting point in our investigation of this topic.



## CHAPTER II

### DEWEY'S CRITIQUE OF THE GREEK CONCEPT OF WORK

#### Introduction

The purpose of this chapter is to provide background for an inquiry into John Dewey's concept of work. Dewey usually begins his development of this concept with a critique of the Greek view of work. In the process of evaluating and criticizing the Greek perspective, Dewey presents his negative view of work thereby indicating what he rejects in the traditional viewpoint. The Greek conception of work concerns him largely because he contends that this concept is still reflected to some extent in modern thought and culture. He is particularly concerned with the dualisms of labor versus leisure and theory versus practice which are vital to the Greek view and which do not foster the development of knowledge as Dewey conceives it or enhance the democratic way of life.

Since Dewey claims that the Greek concept of work and the dualisms which are essential to it were formulated by philosophers reflecting on life as it existed at the time, this chapter begins with Dewey's development of the Greek concept of man and society. He maintains that Greek educational philosophy clearly reflects the influence of the dualistic view of man and society in Greek thought. The sharp dualisms evident in Greek culture became the model for the Greek theory of knowledge and of being. Dewey shows that these dualisms deprived the Greeks of a true science. He is also greatly concerned about the continued influence of these dualisms in modern philosophy and educational practice. In the realm of ideas and philosophy Dewey claims that the main tradition of Western culture has retained intact





this Greek framework of ideas.<sup>1</sup>

Before beginning Dewey's critique of these Greek theories, a brief statement regarding his view of the task of philosophy seems in order. Dewey develops a philosophy of change, and he is suspicious of any fixity. He asserts his philosophy of change for the sake of human progress. For this reason philosophy must become operative and experimental.<sup>2</sup> Philosophy is also a social method for dealing with the social and moral strifes of contemporary society.<sup>3</sup> Philosophers do not create knowledge; they merely reflect on life and society about them and rationalize the possibilities of experience, especially collective human experience.<sup>4</sup> Ratner sums up Dewey's perspective of philosophy in these words:

Fundamental to Dewey's conception is that philosophy is not outside of and above all other human pursuits, cultivating in secrecy and silence a remote, staked-off preserve of its own; philosophy is and works within the open and public domain of all human activities, one among others, differentiated by its scope and function, but in no way set apart.<sup>5</sup>

Philosophy for Dewey operates in experience and not beyond it as the Greeks thought. Much of human experience is characterized as being unstable, uncontrollable, uncertain, precarious. Dewey's overall purpose in developing

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<sup>1</sup>John Dewey, The Quest For Certainty: A Study of the Relations of Knowledge and Action (New York: G.P. Putnam's Sons, 1960), p. 21.

<sup>2</sup>John Dewey, Reconstruction In Philosophy (Boston: The Beacon Press, 1957), p. 121.

<sup>3</sup>Joseph Ratner, "Dewey's Conception of Philosophy," The Philosophy of John Dewey (Evanston and Chicago: Northwestern University, 1939), p. 62.

<sup>4</sup>Dewey, Reconstruction In Philosophy, op. cit., p. 122.

<sup>5</sup>Ratner, op. cit., p. 72.





his philosophy is to extend the stable over the precarious by means of the scientific method for the greater satisfaction of all,<sup>6</sup>

### Dualisms in the Greek View of Man and Society

Dewey finds that Aristotle most clearly and without confusion described the Greek view of life, and especially the Greek concept of work. Aristotle's conception of work can be considered an accurate reflection of Greek culture, of their social organization.<sup>7</sup> This concept is best understood by looking first at the Greek view of man. For the Greeks man occupies the highest place in the scheme of animate existence. Although man shares the constitution and functions of plants and animals--nutritive, reproductive, motor or practical, the distinctively human function is reason existing for the sake of beholding the spectacle of the universe. Hence man is essentially a rational being and the exercise of his reason is the truly human end. Dewey characterizes the Greek view of the ideal man in these words:

The life of observation, meditation, cogitation, and speculation pursued as an end in itself is the proper life of man.<sup>8</sup>

Man's highest good then is the life of contemplation of true Being itself, but this only accounts for the rational part of man. The Greeks hold a dualistic view of man. The human being is also composed of lower elements such as the appetites and the active motor impulses. Reason, however, is

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<sup>6</sup>John Dewey, Experience and Nature (New York: Dover Publications Inc., 1958), pp. 58, 59, 70, 77.

<sup>7</sup>John Dewey, Democracy and Education (New York: The Macmillan Company, 1961), p. 252.

<sup>8</sup>Ibid.



superior. The superiority of reason is due to the control which it is capable of exercising over these elements, for without reason man cannot observe moderation--the law of the mean--and serve desirable ends which must be subjected to the rule of reason.<sup>9</sup>

These ideas of Greek theoretical psychology are reflected in the Greek concept of social structure. By nature society is divided into two principal social classes. In one class the function of reason is capable of operating as a law of life. Only a small portion of society are in this class. In the other class, vegetative and animal functions are dominant. The majority fall into this class. Dewey describes the Greek view of this latter class in these words:

Their energy of intelligence is so feeble and inconstant that it is constantly overpowered by bodily appetite and passion. Such persons are not truly ends in themselves, for only reason constitutes a final end. Like plants, animals and physical tools, they are means, appliances, for the attaining of ends beyond themselves, although unlike them they have enough intelligence to exercise discretion in the execution of tasks committed to them. Thus by nature, and not merely by social convention, there are those who are slaves--that is, means for the ends of others.<sup>10</sup>

Nature places the majority of the people in Greek society into this class of slaves, of laboring people. By nature, reason is not the rule of life for them. On the other hand those in the leisure class are those to whom reason is the rule of life. The dividing line between the laboring and the

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<sup>9</sup>Ibid.

<sup>10</sup>Ibid.





leisure class seems to be the point where reason is dominant over the appetites and the active, motor, impulses. Dewey observes, however, that Aristotle does not hold the view that the class of actual slaves and of natural slaves necessarily coincide. The actual slaves are those determined by social convention or the actual Greek practice of making some people slaves, but for some slaves reason is the rule of life: their slavery is then due to social practice and not due to nature's determination. The natural slaves are those dominated by vegetative and animal functions and are not ruled by reason. For the mass of people who fall into this laboring class, their position or status in society is inferior because they never realize the truly human end, a life governed by reason.

Those within the laboring class are again given a ranking of higher or lower status. The criteria used is again the extent to which reason is the rule of life. For example, the great body of artisans or craftsmen are worse off than the slaves because they do not enjoy the intimate association with the free superior class experienced by the domestic slaves. Only men can rightly be members of the leisure class. Women are placed in the laboring class. Dewey says the following concerning the status of Greek women:

Moreover, women are classed with slaves and craftsmen as factors among the animate instrumentalities of production and reproduction of the means for a free or rational life.<sup>11</sup>

Aristotle, according to Dewey, further makes distinctions between those within the leisure class, those governed by the rule of reason. Some are

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<sup>11</sup>Ibid., p. 253.





superior and some inferior. The superior individual is the thinker who lives in reason, not simply by it. The free citizen who engages in politics and in civic affairs is considered inferior because he lives by reason and not in reason. The man of public affairs uses his reason for the practical affairs of controlling society. Thus those engaged in civic relations retain some of the taint of practice, of external or merely instrumental doing.<sup>12</sup> Civic activities cannot be carried out independent of others. It needs the help of others. It is not a self-sufficient activity. Those engaged in these activities do not realize fully the truly human end. Only a purely intellectual life which is carried on by the individual himself and in himself realizes the truly human end. Dewey summarizes the qualities of those in the highest class in these words:

In knowing, in the life of theory, reason finds its own full manifestation; knowing for the sake of knowing irrespective of any application is alone independent, or self-sufficing. Hence only the education that makes for power to know as an end in itself, without reference to the practice of even civic duties, is truly liberal or free.<sup>13</sup>

### Dualisms in Greek Educational Philosophy

The Greek philosophy of education flows naturally from their view of man and society. The basic component and the one which greatly concerns Dewey is the dualism of labor versus leisure. Dewey's strong conviction respecting this problem is expressed in forceful language.

Probably the most deep-seated antithesis which has shown itself in educational history is that between education in preparation for

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<sup>12</sup>Ibid., p. 254.

<sup>13</sup>Ibid.



useful labor and education for a life of leisure. . . . The separation of liberal education from professional and industrial education goes back to the time of the Greeks, and was formulated expressly on the basis of a division of classes into those who had to labor for a living and those who were relieved from this necessity.<sup>14</sup>

Dewey recognizes that this dualism determined the character of Greek education. He discredits the notion that such an antithesis is necessary, for he considers it purely as a matter of social invention and tradition. The climate of opinion was thus ripe for Aristotle and other Greeks to develop such a view of education.<sup>15</sup>

Dewey explores more deeply the implications of the dualism between labor and leisure as expressed in Greek educational theory. He notes that to the two modes of occupation, with their distinction of servile and free activities, corresponds two types of education: the base or mechanical and the liberal or intellectual.<sup>16</sup> The mechanical type of education is for the laboring class, the class intended by nature to serve and to be a mere means.<sup>17</sup> Such persons are trained "by suitable practical exercises for capacity in doing things, for ability to use the mechanical tools involved in turning out physical commodities and rendering personal service."<sup>18</sup> By repetition, habits of technical skill are acquired by these individuals.

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<sup>14</sup>Ibid., pp. 250, 251.

<sup>15</sup>Ibid., p. 255.

<sup>16</sup>Ibid., p. 253.

<sup>17</sup>Dewey, Experience and Nature, op. cit., p. 369.

<sup>18</sup>Dewey, Democracy and Education, op. cit., p. 253.





No attempt is made to awaken and to nurture thought. On the other hand, the liberal or intellectual education is provided for the leisure class. This training aims to prepare man for his truly human end, i.e., to know. The less this training and knowledge is tainted with practical affairs, with making or doing, the more adequately it prepares for the life of reason.<sup>19</sup>

Dewey considers that Aristotle's educational philosophy is quite consistent when he places what we today term "fine" arts in the category of base education. In so far as music, painting and sculpture involve physical agencies, assiduity of practice, and external results, they are classed with the menial arts. These "fine" arts constitute a part of liberal education, but their educative value lies in the extent to which the training can be purely mental. Aristotle is much concerned about the amount of practice the young should engage in in their study of music. He tolerates a certain amount of practice so long as it is conducive to the understanding and the enjoyment of music, but when a person aims at professional power, music sinks from the liberal to the professional level.<sup>20</sup> A professional musician, artist, or sculptor is ranked in the laboring class and receives educational opportunities according to his status in society.

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<sup>19</sup>Ibid.

<sup>20</sup>Ibid., pp. 253, 254.





### Dualisms in Greek Epistemology and Metaphysics

Dewey perceives that the import of the dualism between labor and leisure also extends to the Greek theory of knowledge. Consistent with his view of philosophy, Dewey claims that the Greek philosophers reflected on the society of their day and formulated their philosophy from the phenomena and problems at hand. The dualisms evident in their society thus provide the model for the dualisms in their theory of knowledge. From the social dualism of labor versus leisure are constructed dualisms such as experience and reason, theory and practice, knowledge and action, knowing and doing.

The definitely socio-practical division between workers and non-citizens who were servile, and the members of the leisure class who were free citizens was converted by philosophic formulation into a division between practice and theory, experience and reason.<sup>21</sup>

In claiming that the Greeks derive their philosophy by reflection on society, Dewey attempts to show that their philosophy is more of a social invention than it is knowledge of or disclosure of pre-existent truths; it is an attempt "to justify on rational grounds the spirit, though not the form, of accepted beliefs and traditional customs."<sup>22</sup>

The consequence of this division in the Greek theory of knowledge is the creation of two kinds of knowledge. One kind of knowledge belongs to the worker; the other kind, to the thinker. The sharp separation between the classes in Greek society is then accompanied by this equally sharp division in their respective acquaintance with learning. For the worker,

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<sup>21</sup>John Dewey, Logic: The Theory of Inquiry (New York: Henry Holt and Company, 1938), p. 73.

<sup>22</sup>Dewey, Reconstruction in Philosophy, op. cit., p. 18.



his knowledge is prosaic and contingent. For the thinker, his knowledge is rational and fixed.

For the Greek community was marked by a sharp separation of servile workers and free men of leisure, which meant a division between acquaintance with matters of fact and contemplative appreciation, between unintelligent practice and unpractical intelligence, between affairs of change and efficiency or instrumentality--and of rest and enclosure--finality.<sup>23</sup>

This separation between two kinds of knowledge is so distinct that the knowledge of the thinker is conceived to be supra-social as well as supra-empirical.<sup>24</sup>

Not only does the Greek concept of work and its attendant dualisms affect their epistemology, but Greek metaphysics is also affected. Dewey considers the metaphysical dualism to be more basic and primary to Greek philosophy than the dualisms in their epistemology. This metaphysical dualism is again thought to be a philosophical formulation of the social dualism of a labor class versus a leisure class. This dualism is fundamental to Greek metaphysics. The Greeks effected in theory a split in Being itself. Being is divided into some things which are inherently defective, changing, relational, and into other things which are inherently perfect, permanent, self-possessed.<sup>25</sup>

The models for Greek idealistic philosophy are found within their society. The artists compose and create the empirical models of their

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<sup>23</sup>Dewey, Experience and Nature, op. cit., p. 93.

<sup>24</sup>Dewey, Logic: The Theory of Inquiry, op. cit., p. 73.

<sup>25</sup>Dewey, Experience and Nature, op. cit., p. 124.







ultimately real objects.<sup>26</sup> The counterpart of the conversion of esthetic objects into objects of ultimate reality is the conversion of operative and transitive objects into things which betray absence of full Being. "This absence causes their changing instability . . . ." <sup>27</sup> Reality is thus divided into two realms for the Greeks: the higher realm of fixed reality and the inferior world of changing things with which experience and practical matters are concerned. Dewey argues that this dichotomy prompted the Greeks to glorify the invariant at the expense of change. It is evident then that all practical activity, the work of the artist, the slave, the craftsmen, and the laborer, is in the realm of change and non-being.<sup>28</sup> Practical action is necessarily concerned with an inferior region of Being, non-being, in which change and uncertainty rules. The world of generation and production is a world infected with non-being, a world of decay and destruction. In this way the Greeks give ontological justification for their depreciation of practice, work, experimentation.<sup>29</sup> On the other hand a corresponding justification is produced for the realm of rational self-activity. The Being that occupies this realm is primary, eternal and self-sufficient. Nothing may alter in this realm; there is no defect or imperfection.<sup>30</sup>

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<sup>26</sup>Ibid., p. 125.

<sup>27</sup>Ibid., p. 124.

<sup>28</sup>Dewey, The Quest For Certainty, op. cit., pp. 15, 16.

<sup>29</sup>Ibid., pp. 18, 19.

<sup>30</sup>Ibid., pp. 15, 19.



The office of knowledge for the Greeks is to uncover the antecedently real rather than to deal with problems as they arise in everyday life. This task of inquiry involves a disclosure of the Real in itself, of Being in and of itself. Dewey further asserts that the basic motive of the Greeks in elevating the unchanging and the fixed was their quest for certainty;<sup>31</sup> the "exaltation of pure intellect and its activity above practical affairs is fundamentally connected with the quest for certainty which shall be absolute and unshakeable."<sup>32</sup>

On the other hand, since the worker is in the realm of change and infected with non-being, his kind of knowledge is only probable, contingent, and lacked prestige and authority.<sup>33</sup> This prosaic knowledge of the artisan is base in the eyes of the thinker because such knowing results from what the artisan does.<sup>34</sup> Thus experimental knowledge is confined to the worker and it consequently makes his role in society negligible.<sup>35</sup> The status of the thinker is superior because he participates more fully in Being by pure rational activity. He escapes the uncertainties of change by contemplation of the eternal, the fixed, the self-sufficient. He is a spectator of pre-existent knowledge, the Real. The measure of the worth of knowledge to the Greeks therefore is the degree to which it is

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<sup>31</sup>Ibid., pp. 21, 22.

<sup>32</sup>Ibid., p. 6.

<sup>33</sup>Dewey, Reconstruction In Philosophy, op. cit., p. 13.

<sup>34</sup>Dewey, The Quest For Certainty, op. cit., p. 14.

<sup>35</sup>Dewey, Experience and Nature, op. cit., p. 92.





contemplative, and philosophy is considered to be the highest form of knowing.<sup>36</sup>

#### Dewey's Criticisms of These Dualisms

Dewey criticizes this concept of knowing because it "diverts thought from inquiring into the purposes which experience of actual conditions suggest and from concrete means of their actualization."<sup>37</sup> In other words, it is a "doctrine of escape from the vicissitudes of existence,"<sup>38</sup> Deliverance from the problems of life is an intellectual affair realized by a knowledge which is attained apart from practical activity. Dewey seeks to elevate practical activity because "knowing is a kind of acting, and the world we know is a set of problems together with the ways for solving them."<sup>39</sup> He continually criticizes the spectator theory of knowledge; knowledge is instrumental for him: the things we know must alter the world of experience in which we live.<sup>40</sup> He argues that it is the business of philosophy to remove the dualism of theory versus practice. This is best accomplished in Dewey's view by showing that knowledge is a species of activity.<sup>41</sup>

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<sup>36</sup>Dewey, Reconstruction In Philosophy, op. cit., pp. 109, 110.

<sup>37</sup>Dewey, The Quest For Certainty, op. cit., p. 17.

<sup>38</sup>Ibid.

<sup>39</sup>Kingsley Price, Education and Philosophical Thought (Boston: Allyn and Bacon, Inc., 1962), p. 471.

<sup>40</sup>Ibid., p. 468.

<sup>41</sup>Ibid., p. 469.



Dewey has great admiration for the Greeks as free thinkers who possessed keenness of observation and the extraordinary power of logical reasoning, but he likewise observes that the dualisms of labor versus leisure and theory versus practice deprived them of science. By their lack of esteem for the manual worker and the consequent lack of prestige and authority associated with his type of knowledge, the Greeks were unable to develop and use the experimental method.<sup>42</sup> Science is a mode of doing from Dewey's viewpoint.<sup>43</sup> Anything connected with making and doing was disparaged by the Greeks; therefore, this attitude toward practical activity and work hindered their development of the experimental method. One of Dewey's purposes in criticizing the Greek view of work, and perhaps the main purpose, is to show that it postponed the development of science, for he states that scientific knowledge did not develop until the Greek view of work and its attendant dualisms were abandoned and the procedures and instrumentalities of the productive workers were adopted:

The authors of classic logic did not recognize . . . that the syntax of operations provides a model for the scheme of ordered knowledge more exacting than that of spoken and written language. Genuine scientific knowledge revived when inquiry adopted as part of its own procedure and for its own purpose the previously disregarded instrumentalities and procedures of productive workers.<sup>44</sup>

"Instrumentalities" means tools or mechanical devices which assist the worker to produce beneficial changes in material things. "Procedures" mean

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<sup>42</sup>Dewey, The Quest For Certainty, op. cit., p. 13.

<sup>43</sup>Ibid., p. 24.

<sup>44</sup>Dewey, Logic: The Theory of Inquiry, op. cit., p. 94.





the methods which workers devise to use their tools and to effect these beneficial changes. Work then provides the "model" for the formulation of the scientific method. Work and the useful arts are discredited by the Greeks, but they become the cornerstones to Dewey's instrumental theory of knowledge. For Dewey considers that "modern science represents a generalized recognition and adoption of the point of view of the useful arts, for it proceeds by employment of a similar operative technique of manipulation and reduction. Physical science would have been impossible without the appliances and procedures of separation and combination of the industrial arts."<sup>45</sup>

Although Dewey sees that modern science and its method of inquiry developed only after men discarded the Greek dualism of theory versus practice, he contends that Greek thought continues to influence culture and thought. In the realm of ideas and philosophy Dewey claims that the main tradition of Western culture has retained intact the Greek framework of ideas. Like the Greeks, modern man, too, wants perfect certainty. It cannot be found by doing and making since these involve "peril, the risk of misadventure, frustration, and failure."<sup>46</sup> This Greek view of knowledge, which holds that knowledge concerns a region of being which is fixed in itself, eternal and unalterable, dominates Western thought. With this view men can know reality, but they cannot change it.<sup>47</sup> The Greeks thus

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<sup>45</sup>Dewey, Experience and Nature, op. cit., p. 133.

<sup>46</sup>Dewey, The Quest For Certainty, op. cit., p. 21.

<sup>47</sup>Ibid.



bequeathed to modern man the spectator theory of knowledge.<sup>48</sup> The dualisms which are vital to this Greek philosophy also persist in modern thought according to Dewey. In fact, he claims that the Greeks fixed for subsequent intellectual history the division of the empirical and the rational, of theory and practice.<sup>49</sup>

### The Influence of Greek Dualisms

Dewey makes some particular allegations respecting the appearance of these dualisms in modern thought and practice. As briefly stated before, he argues that the most deep seated antithesis to appear in educational history is that between "education in preparation for useful labor and education for a life of leisure."<sup>50</sup> Although the actual cultural situation has greatly changed since the time of the Greeks both in theory and in fact, the idea still prevails in society that a liberal education is for the few involved in leadership and a practical education is for the masses involved in industrial affairs. A truly cultural or liberal education has nothing in common with industrial affairs. On the other hand the education fit for the masses must be a useful or practical education in the sense that the practical is opposed "to nurture of appreciation and liberation of thought."<sup>51</sup> The dichotomy is as sharp in modern practice as it has

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<sup>48</sup>Dewey, Reconstruction In Philosophy, op. cit., p. 112.

<sup>49</sup>Dewey, Logic: The Theory of Inquiry, op. cit., p. 73.

<sup>50</sup>Dewey, Democracy and Education, op. cit., p. 250.

<sup>51</sup>Ibid., p. 257.





been in Greek practice. Dewey observes that both cultural and utilitarian subjects are present in the school system. The consequence is an inconsistent mixture:

The result is a system in which both "cultural" and "utilitarian" subjects exist in an inorganic composite where the former were not by dominant purpose socially serviceable and the latter not liberative of imagination or thinking power. . . . The 'utility' element was found in the motives assigned for the study, the 'liberal' element in methods of teaching.<sup>52</sup>

Nearly all subjects are infected by this unhappy compromise between the liberal and the utilitarian. He illustrates how this affects the natural sciences, music and literature.

Natural science is recommended on the ground of its practical utility, but is taught as a special accomplishment in removal from application. On the other hand, music and literature are theoretically justified on the ground of their culture value and are then taught with chief emphasis upon forming technical modes of skill.<sup>53</sup>

These subjects then reflect the influence of Greek educational philosophy by making sharp distinctions between the liberal and the practical.

According to Dewey a confusing notion of the respective meanings of utility and culture tend to perpetuate these inconsistent practices in schools. He proposes that people should not make the one hostile to the other; they should not think that "a subject is illiberal because it is useful and cultural because it is useless."<sup>54</sup> Once this dichotomy is

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<sup>52</sup>Ibid.

<sup>53</sup>Ibid., p. 258.

<sup>54</sup>Ibid.



removed, the way will be open to develop a course of study characterized by a unity of purpose. Democratic principles demand that these dualisms be abolished so that thought can become "a guide of free practice for all and which makes leisure a reward of accepting responsibility for service, rather than a state of exemption from it."<sup>55</sup> Dewey thus believes that democratic principles which imply the use of the scientific method, if applied consistently, can help solve these inconsistencies evident in schools. (Dewey's critique of the Greek theory of work and its import for schools in his day was set forth nearly a half-century ago.) The result of applying these democratic principles will be "the development of a truly democratic society, a society in which all share in useful service and all enjoy a worthy leisure."<sup>56</sup>

### Summary

Dewey's critique of the Greek concept of work indicates his concern with the continued influence in modern society of the dualisms of labor versus leisure, theory versus practice, liberal versus practical. These dualisms which are vital to both the Greek concept of work and their larger philosophical theories are considered to be unnecessary to Dewey and to be a hindrance to the progress of science and the democratic way of life.

Being consistent with his view of the task of philosophy, Dewey

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<sup>55</sup>Ibid., p. 261.

<sup>56</sup>Ibid., p. 256.





claims that the Greek dualism of labor versus leisure as formulated by their philosophers is merely a reflection of the Greek view of man and society. Man himself is divided into superior and inferior elements. The rational is superior; the appetites and the active are inferior. The active work which men do is a base activity; only rational activity, pure contemplation, is held in high esteem. Society is likewise divided into a leisure class, whose chief occupation is pure contemplation, and a laboring class, whose chief occupation is concerned with the world of change, of production. For the majority who fall into the laboring class, their status in society is much inferior to the leisure class whose life is ruled by reason. This accepted social arrangement sets the leisure or ruling class in opposition to the laboring class.

Dewey further observes that these oppositions evident in the Greek view of man and society are extended to Greek epistemology and to their metaphysics. The dualism of labor versus leisure in Greek social structure is reflected in their theory of knowledge as theory versus practice. This theory makes a sharp distinction between the knowledge of the thinker and that of the worker. The knowledge of the thinker involves acquaintance with pre-existent truth. This is the only form of true knowledge because it is concerned with Reality, true Being. Knowledge of this sort is acquired by pure rational activity; pure contemplation. On the other hand, the knowledge of the worker involves acquaintance with the prosaic, matter-of-fact knowledge of the affairs of everyday life. His knowledge is acquired in an inferior world of change by experimentation and manipulation of materials and appliances. Because the worker operates



in the realm of change, non-being infects his knowledge; it is consequently held in low esteem.

One of Dewey's principle criticisms of the Greek concept of work and its attendant dualisms is that they deprived the Greeks of a true science. Dewey argues that our best knowledge is not obtained by pure contemplation but rather by use of the scientific method. Scientific inquiry advanced when it began to employ the instrumentalities and procedures of the worker. Work provided the model for the development of science. The very activity which the Greeks disparaged became fundamental to modern science. The method of the worker became the method of the scientist. Greek influence on Western thought delayed progress in science until the value of the method of workers was recognized as a means to acquire knowledge.

This Greek theory of knowledge which elevates the fixed and depreciated practical activity is motivated by the quest for certainty. Dewey shows how this spectator theory of knowledge continues to influence Western philosophical thought. He also shows that our educational system is an inconsistent mixture of the Greek dualisms of labor versus leisure and theory versus practice. For Dewey the method of science and the democratic principles are sufficient guides for education, and if consistently followed no dualisms will result. The Greek theory of work and its attendant unrealistic dualisms should therefore be abandoned. Instead of being depreciated, work or practical activity should be elevated because it provides the model for scientific inquiry which in turn creates useful knowledge and fosters the development of a truly democratic society.





## CHAPTER III

### WORK, SCIENCE AND INTELLIGENCE

#### Introduction

In the previous chapter it was noted that Dewey seeks to elevate the human activity called work. His rejection of the Greek concept of work stems from the fact that the Greeks disparaged work, the very activity which could have provided them a model for the development of science, as Dewey understands it. How work is related to science is the central theme of this chapter. It is in this relationship that Dewey's view of work becomes important in his general philosophical system. The relationship of intelligence to work and science is the other important point developed in this chapter.

Fundamental to Dewey's philosophy is his concept of experience. Since a knowledge of this concept will be essential to understand his view of work and its relationship to science and intelligence, a brief explanation follows. Experience in its unanalyzed totality constitutes the starting point for Dewey. He views experience not as something separate from nature but as being of, as well as in, nature. He criticizes traditional philosophers because "experience to them is not only something extraneous which is occasionally superimposed upon nature, but it forms a veil or screen which shuts us off from nature, unless in some way it can be 'transcended'."<sup>1</sup> For Dewey experience is the only method we have for getting at nature, for penetrating and reaching down into its depths.

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<sup>1</sup>John Dewey, Experience and Nature (New York: Dover Publications, Inc., 1958), p. 1a.



Experience also has breadth to an indefinitely elastic extent. By this is meant that from one interaction or experience in nature it is possible to find many inferences which could expand the meaning of that experience in nature many times. To Dewey the very existence of science is evidence that "experience is such an occurrence that it penetrates into nature and expands without limit through it."<sup>2</sup> Experience is then the starting point for dealing with nature.

Dewey identifies two kinds of experience, and the distinction between them helps one see that experience has great import for the method of his philosophy. He makes a contrast between the gross, macroscopic, crude subject-matters in primary or immediate experience and the refined, derived objects of reflection in secondary or mediated experience. According to Dewey, "the distinction is one between what is experienced as the result of a minimum of incidental reflection and what is experienced in consequence of continued and regulated reflective inquiry."<sup>3</sup> The subject-matter of primary experience sets the problems and furnishes the first data of reflection. Primary experiences set up disturbances; when these disturbances are translated into a problem requiring reflective thoughts for a solution, these objects of reflection are called secondary objects. A test and verification of these secondary objects of reflection is secured only by a return to primary experience. The role of these secondary objects is not to establish a fixed object of knowledge, but rather these

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<sup>2</sup>Ibid., p. 1.

<sup>3</sup>Ibid., p. 3.





objects aim at explaining the primary objects; they enable us to grasp them with understanding.<sup>4</sup> The world of existence, of primary experience, contains a mixture of the regular and dependable and the unsettled and uncertain. Because of this mixture, reflection is possible, and such reflection becomes necessary in order to relieve humanity from the oppressive aspects of immediate things and events and to render them more satisfying to people.<sup>5</sup>

Dewey's concept of experience is fundamental to his epistemology. Primary experience or immediacy of existence is ineffable. This means that it is futile to say anything to one's self and it is impossible to say anything to another respecting immediate experiences. "Things in their immediacy are unknown and unknowable."<sup>6</sup> Immediate things may be painted by words, but they may not be described or defined.

In its own integrity an immediate thing just exists as it exists; it stays or it passes; it is enjoyed or suffered. That is all that can be said.<sup>7</sup>

Primary experiences then are not matters of knowledge. Knowledge characterizes secondary or mediated experience where things or events of experience are means or instrumentalities aimed at effecting changes

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<sup>4</sup>John Dewey, Reconstruction In Philosophy (Boston: The Beacon Press, 1957), p. 87.

<sup>5</sup>Dewey, Experience and Nature op. cit., pp. 1-77.

<sup>6</sup>Ibid., p. 86.

<sup>7</sup>Ibid., p. 143.



in existence for desired purposes.<sup>8</sup>

### Work

Work, from Dewey's viewpoint, is a fundamental human activity designed to cope with the demands of existence. In fact, useful labor and its coercive necessity are considered to be one of the most self-evident things of human experience.<sup>9</sup> Since much of immediate experience is characterized by Dewey as being precarious and uncertain, work is man's first step away from these oppressive aspects of immediate experience; it is man's attempt to render these experiences more beneficial to himself.<sup>10</sup> Work then is mediated experience; it is a response to the problematic elements of existence, for surely there is no problem more insistent than the preserving of life itself.

The oppressive character of human experience occasions the cognitive features of work. The conditions of life are exacting to such an extent that man is disciplined by these conditions to employ his thought if his work is to be successful.

The exacting conditions imposed by nature, that have to be observed in order that work be carried through to success, are the source of all noting and recording of nature's doing. They supply the discipline that chastens exuberant fancy into respect for the operation of events, and that effect subjection of thought to a pertinent order of space and time.<sup>11</sup>

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<sup>8</sup>Ibid., p. 161.

<sup>9</sup>Ibid., p. 84.

<sup>10</sup>Ibid., p. 128.

<sup>11</sup>Ibid., p. 121.





In other words, nature is the taskmaster which demands that work be accompanied with thought; therefore, thought is necessary in order to secure success in coping with the demands of existence. This discipline of nature directs man's attention to nature's activities and it arouses the intellectual activity of "noting" and "recording" those events in nature most useful in solving life's problems. Dewey further notes that necessity is the "mother of invention, discovery and consecutive reflection."<sup>12</sup> Reflective activity required in solving the pressing problems of existence thus characterizes work and manifests its cognitive aspects.

Dewey is primarily concerned with work in the sense of intelligent action. He readily acknowledges that man can go through the mechanical motions of work without any use of intelligence.<sup>13</sup> When imagination and reflective inquiry come to attend work, it may then become a significant and an agreeable activity.<sup>14</sup>

Dewey notes that there is a method in work which gives it the standing of an intelligent activity. Work has a method in that it is a directed activity whose expectations and ideas are tested by actual consequences:

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<sup>12</sup>Ibid., p. 122.

<sup>13</sup>John Dewey, How We Think (Boston: D.C. Heath & Co., 1910), p. 212.

<sup>14</sup>Dewey, Experience and Nature, op. cit., p. 81.



The work signifies activity directed by ends that thought sets before the person as something to be accomplished; it signifies ingenuity and inventiveness in selecting proper means and making plans, and thus, finally, signifies that expectations and ideas are tested by actual results.<sup>15</sup>

The end or purpose of work is that which directs the activity. Intelligence must be exercised in selecting the means to achieve the ends-in-view.<sup>16</sup>

Intelligence is involved further when the consequences of selecting these are noted. That ends-means or the means-consequence relation is then the essential feature of work; it is this relation which enables work to be characterized as an intelligent activity. Involved in this intelligent activity is overt doing, the manipulation of things by instruments. These instruments and methods of manipulation require ingenuity and inventiveness in order to achieve the desired results.<sup>17</sup>

Things of human experience gain meaning when they are used as a means to bring about consequences, or as standing for consequences for

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<sup>15</sup>Dewey, How We Think, op. cit., pp. 211, 212.

<sup>16</sup>For Dewey there are only ends-in-view; he therefore rejects the notion of a fixed end. This means that there are no absolute or final purposes in life. Life is just solving problems. Ends are, in fact, literally endless, forever coming into existence as new activities occasion new consequences. Ends-in-view denote plans of action or purposes. They are not ends in the sense of limits to means of deliberation, but as ends of deliberation they become means of redirecting thought and action into new possibilities. This brief summary of Dewey's view of ends has been taken from the following references: John Dewey, Essays In Experimental Logic (Chicago: The University of Chicago Press, 1916), pp. 371-373; John Dewey, Logic: The Theory of Inquiry (New York: Henry Holt and Company, 1938), pp. 167, 168; John Dewey, Human Nature and Conduct (New York: The Modern Library, 1930), pp. 223-232.

<sup>17</sup>John Dewey, Interest and Effort in Education (Boston: Houghton Mifflin Company, 1913), pp. 80, 81.





which means must be discovered. It is in this sense that Dewey asserts, "The relation of means-consequence is the center and heart of all understanding."<sup>18</sup> Illustrations of this relation can be found in all cases of ordinary planning. People think of something needful or desirable, and then they have to seek out materials and methods for bringing it to pass. Every time a person solves a problem of this kind, according to Dewey, things enter into the means-consequence relation and in doing so take on added meaning.<sup>19</sup>

The tool which the workman uses also signifies the means-consequence relation. A tool is defined by Dewey in terms of what it will do to other things. In this sense a tool represents a causal connection between things in nature; a sequential bond of nature is embodied in a tool. A tool can also have a subjective relation to the worker as a mere convenience, but its primary relationship is toward external things, as the hammer to the nail, and the plow to the soil. In this objective relation between things in nature a tool gains its meaning. Subjectively, tools can be enjoyed. Because the workman recognizes the bond with nature which characterizes a tool, he maintains an interest in it and is able to use it in his work to achieve certain consequences. Tools then are instrumental to man in controlling the things of experience.<sup>20</sup>

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<sup>18</sup>Dewey, How We Think, op. cit., p. 146.

<sup>19</sup>Ibid., p. 147.

<sup>20</sup>Dewey, Experience and Nature, op. cit., pp. 84, 85, 122, 123.



## Science

It will be necessary at this point to give a brief outline of Dewey's concept of science before a relationship between work and science can be developed. Science is the most important means to penetrate nature and render it beneficial to mankind; it is the most efficacious means available to deal with the uncertain conditions of existence. Science is the means to solve the perplexities to which the crude materials of experience give rise; in this sense science is a means of control, a means to render stable the precarious experiences of life.<sup>21</sup>

"Science is experience become rational."<sup>22</sup> Reason for Dewey operates within experience, not beyond it, in order to give experience an intelligible and a reasonable quality. The knowledge which is the fruit of science results from changes in the environment such that life is rendered more satisfying.<sup>23</sup> This knowledge which intelligence creates by science is a relation between a thought and an overt action.<sup>24</sup> In fact, Dewey defines mind itself in terms of overt action, the doing and the results involved in experimental inquiry.<sup>25</sup>

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<sup>21</sup>Ibid., pp. 1, 7, 11.

<sup>22</sup>John Dewey, Democracy and Education (New York: The Macmillan Company, 1961), p. 225.

<sup>23</sup>Ibid., p. 228.

<sup>24</sup>Kingsley Price, Education and Philosophical Thought (Boston: Allyn and Bacon, Inc., 1962), p. 470.

<sup>25</sup>John Dewey, The Quest For Certainty: A Study of the Relation of Knowledge and Action (New York: G.P. Putnam's Sons, 1960), p. 229.





Dewey lists and describes three outstanding characteristics of experimental inquiry which indicate how things can be known. The first is that all experimentation involves overt doing. This means that definite changes are made in the environment or in our relation to it. Scientific instruments and procedures are vital in producing these changes. The second is that an experiment is a directed activity. It is an activity directed by the ideas determined by the problem which induces the inquiry. In other words, it is not a random activity, for the ends-in-view determine the selection of means. The causal or means-consequence relation is central in the third trait. This trait, which gives full meaning to the other two, means that "the outcome of the directed activity is the construction of a new empirical situation in which objects are differently related to one another, and such that the consequences of directed operations form the objects that have the property of being known."<sup>26</sup> Knowledge then is "the fruit of the undertakings that transform a problematic situation into a resolved one."<sup>27</sup>

### Work and Science

The history of science provides, in the first place, evidence of the relation between work and science. Dewey notes that "the history of culture shows that mankind's scientific knowledge and technical abilities have developed, especially in their earlier stages, out of

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<sup>26</sup>Ibid., pp. 86, 87.

<sup>27</sup>Ibid., pp. 242, 243.



the fundamental problems of life."<sup>28</sup> Work is the means employed by men to solve these fundamental problems of life. Dewey's thesis stated in simpler terms means that the science grew out of useful occupations. He cites a number of examples to illustrate his point:

Anatomy and physiology grew out of the practical needs of keeping healthy and active; geometry and mechanics out of demands for measuring land, for building, and for making labor-saving machines; astronomy has been closely associated with navigation, keeping record of the passage of time; botany grew out of the requirements of medicine and agronomy; chemistry has been associated with dyeing, metallurgy, and other industrial pursuits.<sup>29</sup>

Science thus grew out of the enlarging body of positive and tested knowledge accumulated by the arts and crafts. These technologies gave "that common-sense knowledge of nature out of which science took its origin."<sup>30</sup> Donohue summarizes Dewey's view that the sciences grew out of work activities:

It was in their work, then, that men first used the genuinely fecund method of inquiry, the practical method of hypothesis and test. The farmer had a field to sow, the carpenter a bench to make; and each was forced to visualize his goal in relation to the means for reaching it. Their strategy was devised in light of the total situation; and if the corn grew or the bench weathered hard usage, these experiences confirmed or corrected the initial forecasts. Here was the "scientific method" in an unreflective but authentic form, and the sciences themselves, said Dewey, gradually unfolded from just such useful social occupations.<sup>31</sup>

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<sup>28</sup>Dewey, How We Think, op. cit., p. 216.

<sup>29</sup>Ibid.

<sup>30</sup>Dewey, Reconstruction In Philosophy, op. cit., p. 12.

<sup>31</sup>John W. Donohue, Work and Education: The Role of Technical Culture in Some Distinctive Theories of Humanism (Chicago: Loyola University Press, 1959), p. 60.





In work men are actually employing the scientific method in a sort of embryonic form to solve the problems of existence.

The instrumentalities and procedures of workers were in time adopted by scientists; in this sense work provided the model for science.<sup>32</sup> Science advanced when it began to develop instrumentalities and procedures to effect changes in nature and to control nature by these means. Advance in the history of science was thus "marked by the adoption and invention of devices and related techniques."<sup>33</sup> Science found it necessary to abandon the spectator theory of knowledge formalized by the Greeks and to put into practice the experimental method which deals with events of change and everyday experience. The viewpoint of the worker provided the model for science to follow if it was to cope with nature and render experience more satisfying. Dewey states the debt modern science owes to the instrumentalities and procedures of workers which provided the model for science:

Modern science represents a generalized recognition and adoption of the point of view of the useful arts, for it proceeds by employment of a similar operative technique of manipulation and reduction. Physical science would be impossible without the appliances and procedures of separation and combinations of industrial arts.<sup>34</sup>

Work then gains a place of great importance in Dewey's philosophy since it provided the model for science. In fact, Dewey observes that progress in

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<sup>32</sup>John Dewey, Logic: The Theory of Inquiry (New York: Henry Holt and Company, 1938), p. 94.

<sup>33</sup>Ibid., p. 391.

<sup>34</sup>Dewey, Experience and Nature, op. cit., p. 133.



science was slow when men had a contempt for the materials, instruments and techniques involved in manual pursuits. During these times of slow progress, men attempted to develop knowledge out of general principles by logical reasoning. It was accordingly absurd to consider that knowledge came from the practical work activities of men. The Greeks, whose viewpoint was detailed in the previous chapter, provide an example of those who slowed up the progress of science by disparaging practical activity and by elevating the fixed, the eternal. The change to a concern for experimental knowing came when human interest became centered in the question of the control of nature for human uses; this was the central concern in work before science adopted the point of view involved in work. Scientific knowledge of this sort progressed rapidly during the seventeenth and succeeding centuries.<sup>35</sup>

The principle of causality evident in both work and science provides the most intrinsic relationship between work and science, for productive labor presents to reflective thought regularity, orderly sequence as a controlling principle.<sup>36</sup> In work men make plans, test their hypothesis, and discover the best solution by knowing the consequence of their action. Dewey concludes from this that labor and the use of tools provide sufficient empirical reason for belief in the principle of causation. In fact, they are considered to be the only empirical events that can be

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<sup>35</sup>Dewey, Democracy and Education, op. cit., pp. 201, 202.

<sup>36</sup>Dewey, Experience and Nature, op. cit., p. 85.





pointed to in this regard.<sup>37</sup> Dewey notes that when reflective thought first stated the principle of causation, it merely put into conscious formulation the procedures of the workman.

The first thinker who proclaimed that every event is effect of something and cause of something else, that every particular existence is both conditioned and condition, merely put into words the procedure of the workman, converting a mode of practice into a formula.<sup>38</sup>

A distinctively intellectual principle is thus evident in work: the means-consequence relation or the principle of causation. The principle of causation evident in both work and science indicate that these two activities are in close relationship from Dewey's viewpoint.

#### Intelligence, Science and Work

In the remaining portion of this chapter a more careful development of the role of intelligence with regard to work and science will be presented. In a sense the place of intelligence in work and science is implicit in the above discussion. A more explicit development, however, is necessary in order to make clear this relationship. In the first place, Dewey's concept of intelligence will be set forth. Then the relationship between intelligence and science follows from this. Finally, the relation of both work and science to intelligence will be indicated.

Intelligence to Dewey is the habit of responding to problematic

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<sup>37</sup>Ibid., p. 84.

<sup>38</sup>Ibid.



situations in life.<sup>39</sup> It is a method of operating within the world.<sup>40</sup> It may appear that all human action involves some intelligence from Dewey's viewpoint, but he carefully qualifies what he means by intelligent action. Some actions can be termed blind, but others can be termed intelligent. Intelligence becomes "a quality of some acts, those which are directed; and directed action is an achievement and not an original endowment."<sup>41</sup> Direction to action is best achieved by using the scientific method, and this kind of directed action is the best means by which the problematic situations in life are resolved.<sup>42</sup>

From Dewey's viewpoint, the path which intelligence must follow is that outlined by science. He argues that the spectator theory of knowledge does not point the way intelligence should follow because intelligence to the Greeks was pure contemplation, pure rational activity. That kind of intelligence did not resolve problematic situations; it did not create knowledge instrumental in coping with the uncertainties of experience; it was concerned with antecedently existent knowledge far removed from experience. Science, as defined by Dewey, alone opens the way for the most efficient use of intelligence.

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<sup>39</sup>Price, op. cit., p. 420.

<sup>40</sup>Dewey, The Quest For Certainty, p. 220.

<sup>41</sup>Ibid., p. 245.

<sup>42</sup>Ibid., pp. 244, 245.





From Dewey's viewpoint work is really the primary manifestation of this productive and instrumental activity, although the employment of the scientific method is the best and most productive use of intelligence.<sup>47</sup> In work intelligence is engaged in solving the basic problems of existence; in their work men act upon their environment to effect a more satisfactory change in conditions. Thought is required in this activity in order to determine the means to accomplish the desired changes. When the consequences are satisfying, work resolves a problem of experience and thus manifests intelligence in this process. A certain kind of knowledge results from intelligent work activities. The knowledge produced from such work activity is classified as "common-sense" knowledge. It is not classified as scientific knowledge, because the procedure of the workman is only a rudimentary prototype of the experimental doing. Work activity is accompanied by cruder appliances, less accurate instruments, and a lesser degree of control of nature.<sup>48</sup> According to Dewey, "there is no difference in logical principle between the method of science and the method pursued in the technologies."<sup>49</sup> The differences are merely of a practical nature as mentioned above. The knowledge of science then is not unique, but it represents the best available because its instrumentalities and procedures represent man's greatest advance in instrumental knowing.<sup>50</sup> The method of science is therefore an abstract formulation of the method of

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<sup>47</sup>Donohue, op. cit., p. 60.

<sup>48</sup>Dewey, The Quest For Certainty, op. cit., pp. 84-87.

<sup>49</sup>Ibid., p. 84.

<sup>50</sup>Ibid., p. 85.



work; it is a refinement of the method always evident in work. Science, however, is a matter of chief concern to Dewey since scientific inquiry manifests intelligence at its best; in fact, the intelligent action associated with scientific endeavor is to Dewey "the sole ultimate resource of mankind in every field whatsoever."<sup>51</sup>

### Summary

The relationship between work and science and work and intelligence indicate the relevance of Dewey's concept of work to his general philosophical position. Fundamental to Dewey's philosophy is his concept of experience. Experience is the only way to get at nature and to probe its depths of meanings. Only in reflective or secondary experiences is knowledge possible, and this knowledge is instrumental in that it is aimed at effecting changes in experience for desired purposes.

Work is a fundamental human activity through which men cope with the demands of existence. Work is mediated experience; it is a response to the problematic elements of existence. The oppressive character of human experience occasions the cognitive features of work if work is to be successful in solving the problems of maintaining life itself. Work as an intelligent activity may be a significant and an agreeable activity. The method involved in intelligent labor is the means-consequence relation. The worker must select means to achieve his ends-in-view. This

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<sup>51</sup>Ibid., p. 252.





selection, the carrying out of plans, and the testing of consequences give work its intellectual quality. Tools provide meaning to the experience of the workman since they represent a causal connection between things in nature and are thus useful in controlling nature.

Science is the most efficacious means available to deal with the uncertain conditions of existence. Science is mediated experience; in this sense it is experience become rational. The scientific method is aimed at the control of nature in order to solve the problems of experience. Scientific instruments and procedures are vital in producing changes in nature in order to control it. Knowledge characterizes scientific endeavor which aims at transforming a problematic situation into a resolved one.

Dewey notes that the history of science illustrates the relation between work and science. Science grew out of useful occupations. Science was able to progress when it adopted the instrumentalities and procedures of workers. Work then provided the model for science. For Dewey, the principle of causality evident in both work and science provides the most intrinsic relationship between work and science. Science is merely an abstract formulation of the mode of practice evident in work.

Intelligence is the habit of responding to problematic situations in life. Intelligent actions are directed actions. Direction to action is best achieved by using the scientific method. In fact, intellectual growth is closely related to growth in the use of the scientific method. Work is the primary manifestation of intelligence, but science is the best



and the most productive use of intelligence. The knowledge resulting from intelligent work activities is classified as "common-sense" knowledge, but scientific knowledge ranks superior because its instrumentalities and procedures are more refined. Science, in fact, is the sole ultimate resource of mankind in every field of endeavor.





## CHAPTER IV

### WORK, PLAY AND ART IN EDUCATION

#### Introduction

The main purpose of this chapter is to show how Dewey's concept of work functions in education. Work, play and art are intrinsically related, and they have great importance in his educational philosophy and recommendations. These concepts, especially work, point out the way in which activities are to be utilized in education. Their use is not incidental to the educational process but they are vital. These concepts then are important in Dewey's attempt to translate his general philosophy into both educational theory and practice.

Work, play and art are thought by Dewey to be various forms of human activity which are of sufficient importance educationally to justify differentiation.<sup>1</sup> Man is naturally an active being; he is in a constant state of action. Dewey asserts:

It is absurd to ask what induces a man to activity generally speaking. He is an active being and that is all there is to be said on that score.<sup>2</sup>

Work, play and art simply represent certain aspects of human activity. No special cause or special object has to be searched out to account for these activities of men. "The only thing necessary is to state the

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<sup>1</sup>Paul Monroe (ed.), A Cyclopedia of Education (New York: The Macmillan Company, 1913), IV, 725.

<sup>2</sup>John Dewey, Human Nature and Conduct (New York: The Modern Library, 1930), p. 119.



conditions under which organic activity takes this or that form."<sup>3</sup> This chapter will therefore develop Dewey's ideas respecting the form which these activities take. He engages in a program of analysis which differentiates one activity from the other. The starting point is "the active process in which life manifests itself."<sup>4</sup> In other words, the unity which binds these concepts together and gives them common meanings is man's active nature. That Dewey describes man as an active being is consistent with his biological perspective of man. Man is viewed as a biological organism in a natural matrix; he is a living being "ceaselessly interacting with its environment and directing all its efforts toward the prolongation and expansion of life."<sup>5</sup>

Donohue observes that, with education in mind, Dewey "sets up a genus: active occupation. Its species include work, play and art. Or perhaps this active occupation should be thought of as a continuum whose moments, though separate, are not to be sundered."<sup>6</sup> Donohue thus characterizes the relationship between work, play and art as a genus or continuum called active occupation. Donohue means by moments the parts which make up the whole of the continuum in the way that the species make up the genus. Characterizing the connection between work,

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<sup>3</sup>Monroe, op. cit.

<sup>4</sup>Ibid., p. 726.

<sup>5</sup>John W. Donohue, Work and Education (Chicago: Loyola University Press, 1959), 59.

<sup>6</sup>Ibid., p. 88.





play and art as a continuum or genus gives the idea that these concepts have something in common and that they do not imply oppositions. This seems consistent with Dewey's intentions. The important thing for him is that there should be no sharp distinction between these ideas; no dualism between work and play, for example, could have been tolerated by Dewey.<sup>7</sup> Any sharp differentiation between work, play and art would have been inconsistent with Dewey's philosophy for Dewey aimed at eliminating such sharp distinctions or dualisms from both philosophy and education. Much of Dewey's criticism of philosophy and of education was directed against dualisms which placed thought in opposition to action. The earlier chapter on Dewey's critique of the Greek concept of work provides an example of his criticism of dualisms in philosophy and in education.

In the next part of this chapter, play, work and art will be defined and related according to their respective place in the continuum of active occupations. Play will be treated first. Work and art will follow. Finally, the relation of these three to each other will be explained. When this continuum is explicated, it will then be possible to indicate the function of active occupations in education. The function of work, however, will receive most of the attention since Dewey's view of work and its educational implications are the central concern of this thesis.

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<sup>7</sup>John Dewey, How We Think (Boston: D.C. Heath & Co., 1910), p. 212.



## Play

Dewey's definition of play is "those activities which are not consciously performed for the sake of any result beyond themselves; activities which are enjoyable in their own execution without reference to ulterior purpose."<sup>8</sup> The activity is its own end, instead of its having an ulterior end. This definition is consistent with Dewey's viewpoint only if it is understood in the right sense. The statement can be falsely taken to mean that play activity is momentary, having no element of looking ahead and none of pursuit.<sup>9</sup> Dewey cites the example of hunting to make himself clear. Hunting is a very common form of adult play, but foresight and direction of one's activities are evident and are determined by what is being hunted or watched for. The action of the hunter has meaning, a purpose. Action that has no direction is considered blind; it is merely an action of the moment. Dewey's point is that play has "an end in the sense of a directing idea which gives point to the successive acts."<sup>10</sup> People who play are not just engaged in physical movement or physical exuberance, but they are trying to effect something. Play then is characterized by an attitude that involves anticipatory forecasts which stimulate the activity. This anticipated result is "rather a

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<sup>8</sup>Monroe, op. cit., p. 725.

<sup>9</sup>Dewey, Democracy and Education (New York: The Macmillan Company, 1961), p. 202.

<sup>10</sup>Ibid., p. 203.





subsequent action than the production of a specific change in things."<sup>11</sup> One action leads into another. The present action is determined in some degree by the activity which preceded it.

When Dewey discusses play, his major concern is the attitude of mind involved in play. Physical movements and physical exuberance merely manifest a condition of the mind. With reference to the play of children, Dewey does not primarily identify play with anything they do externally, but rather he identifies play with the mental attitude of children.<sup>12</sup> Play is the free play, the interplay, of all the child's powers, thoughts and physical movements. The aim of this free play is to embody in a satisfying form the child's own images and interests; in this sense the mental attitude is more important than the physical movements. Play then is the child's means to realize the growth of his budding powers.<sup>13</sup> Persons who play are not just doing something for excitement or fancy; they are trying to do or to effect something. What the person has in mind dominates the activity and determines its character.<sup>14</sup>

Dewey considers this mental attitude resident in play as a suggestion that gives play its freedom from physical things. When

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<sup>11</sup>Ibid.

<sup>12</sup>John Dewey, The School and the Child (Glasgow: Blackie & Son, Ltd., no date), p. 48.

<sup>13</sup>Ibid.

<sup>14</sup>John Dewey, Democracy and Education, op. cit., p. 203.



the things of play are treated "simply as vehicles of suggestion, what is suggested overrides the thing."<sup>15</sup> This means that the person is not bound to the physical traits of things. Dewey illustrates this point by citing the example of a child who plays horse with a broom or cars with chairs. It is of no account to the child that the broom does not really resemble a horse or the chair a car; the important thing is what the thing represents or suggests. The child is thus free in that he is not bound in his play to physical things.<sup>16</sup> Things in this sense become signs; they gain a representative capacity as standing for other things. When this attitude characterizes play, it is transformed "from mere physical exuberance into an activity involving a mental factor."<sup>17</sup> The thing physically present is therefore subordinated to the thing ideally signified or suggested.

Because of the nature of the directing idea in play, Dewey claims that play is free, plastic.<sup>18</sup> Play certainly has an end-in-view, but in play a person does not have to concentrate on his goal with persistence; however, "where some definite external outcome is wanted, the end has to be held to with some persistence, which increases as the contemplated result is complex and requires a fairly long series of intermediate adaptations."<sup>19</sup> When an intended activity merely

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<sup>15</sup>Dewey, How We Think, op. cit., p. 210.

<sup>16</sup>Ibid.

<sup>17</sup>Ibid., p. 209.

<sup>18</sup>Dewey, Democracy and Education, op. cit.

<sup>19</sup>Ibid.





anticipates another activity, it is not imperative to look far ahead; this in turn makes it possible to alter the activity easily and frequently. For example, a child who is making a toy boat has to hold on to a single end and to direct a considerable number of activities by this one idea; the end must be held to with persistence. On the other hand, if a child is just "playing boat," he can change whatever material serves as a boat almost at will. The imagination makes whatever it will of materials so long as they serve to carry the activity ahead.<sup>20</sup> In play then a person is not bound to external objects, and he is freer in his choice of the means to accomplish the desired end, which is thought of as more activity in the same line.<sup>21</sup>

Interest in play is an important consideration in Dewey's view of play. In play, interest in the activity is direct; the existing play experience holds a person for its own sake. There is no demand that this activity carry a person into something beyond the activity itself.<sup>22</sup> Interest in play must be considered as interest in an activity that flows on from moment to moment. Interest in play is "more or less casual, following the accident of circumstances and

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<sup>20</sup>Ibid.

<sup>21</sup>Ibid., p. 205.

<sup>22</sup>John Dewey, Interest and Effort in Education (Boston: Houghton Mifflin Company, 1913), p. 21.



whim, or of dictation."<sup>23</sup> Although interest centers in the activity itself, there is some reference to its outcome.<sup>24</sup> There is an end-in-view, more activity in the same line; but interest in the activity itself is dominant. The emphasis then is on interest in the activity; the joy of the activity itself is thereby discovered.

Play to Dewey is not "fooling." By fooling he means a "series of disconnected temporary outflows of energy dependent upon whim and accident."<sup>25</sup> In fooling all reference to outcome is eliminated from the sequence of ideas and acts that make play. One activity does not flow into another, but rather each act is cut loose from every other so that it becomes "fantastic, arbitrary, aimless."<sup>26</sup> The result accordingly is a mere fooling. On the other hand, play predicates serious absorption in the activity and a conscious concern for ends is entertained to a certain extent.

### Work

Among the moments of Dewey's continuum of active occupations, according to Donohue's interpretation, work is considered to be the most valuable.<sup>27</sup> Although Donohue considers that Dewey valued work

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<sup>23</sup>Dewey, How We Think, op. cit., pp. 212, 213.

<sup>24</sup>Ibid., p. 284.

<sup>25</sup>Ibid., p. 285.

<sup>26</sup>Ibid.

<sup>27</sup>Donohue, op. cit., p. 90.





above play and art, it seems reasonable to assume that Dewey would not have elevated the value of work to the extent that any sharp distinctions could have arisen between work and the other concepts.

The concept of work which was developed in the previous chapter will not be repeated at this point. Only those aspects of Dewey's view of work will be developed which are essential to show how work fits into the continuum of active occupations, to explain its relation to play and art.

Dewey focuses his attention on the mental attitude in work, although the organs of the body are essential to work. Mere external performance or physical doing alone is not sufficient to describe the activity of work.<sup>28</sup> As it is in play, the mental factor is also his greatest concern in work. But the mental factor in work is more prominent than it is in play. This more prominent intellectual quality found in work is what chiefly differentiates work from play. The intellectual quality essential to work is a remoter end in time which a person has to hold to with persistence. This end that work has in view serves to suggest and to regulate a series of acts.<sup>29</sup> Play indeed has an end-in-view, but this end is not as remote and does not require as much regulation of the activity itself. Thus the regulation of means imposed by a more remote end is that characteristic of work which makes it more intellectual than

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<sup>28</sup>Dewey, How We Think, op. cit., p. 211.

<sup>29</sup>Dewey, Interest and Effort in Education, op. cit., p. 79.



play.

Dewey further illustrates what he means by this mental factor in work. Sometimes people participate in routine activities that accomplish useful results, but these are accomplished with a minimum of thoughtful selection of means to achieve ends. Activity of this kind is not considered to be intelligent because the person involved makes little or no conscious effort to shape the means by the ends-in-view. This is not work from Dewey's viewpoint, for it is performed mechanically and thoughtlessly. Work rather signifies an activity which is directed by ends that "thought sets before the person as something to be accomplished; it signifies ingenuity and inventiveness in selecting proper means and making plans, and thus, finally, signifies that expectations and ideas are tested by actual results."<sup>30</sup>

Interest in the work activity is also important. In play, interest is in an activity that flows from moment to moment, but in work interest is in an activity as it tends toward a culmination or outcome. Work then possesses a thread of continuity which binds its successive stages together into a pattern. In play, the interest is more or less casual, following the accident of circumstances and whim, but in work interest in the activity is "enriched by the sense that it leads somewhere, that it amounts to something."<sup>31</sup> The presence of interest in itself does not

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<sup>30</sup>Dewey, How We Think, op. cit., pp. 211, 212.

<sup>31</sup>Ibid., pp. 212, 213.





distinguish play from work since interest is vital to both. The difference is one of the direction of interest. In work, the end holds the attention and controls the notice given to means. On the other hand, interest centers in the play activity without much regard to its outcome. The contrast then is not one of cleavage but only of emphasis.<sup>32</sup>

Dewey distinguishes his concept of work from the usual definitions of labor, toil and drudgery. He thinks that the word work, in one sense, is unsatisfactory because it has unfortunate connotations associated with it.<sup>33</sup> He does, however, carefully qualify his concept of work, and furthermore he assigns the undesirable meanings to labor, toil and drudgery. "Labor" is considered to be an economic term which means a form of work in which the direct outcome accomplished is valued by the worker only as a means of exchange. Here money is paid for the product so that an object of more direct value can be obtained. The product of work is not directly valued, but rather other objects which can be purchased with the money received for work performed. "Toil" to Dewey implies unusual arduousness in a task which involves fatigue of natural powers.<sup>34</sup> "Drudgery" is quite disagreeable, because interest in the activity does not suffuse the process of getting the result. Work of this type, exclusive interest in a result, thus becomes hateful; it is just a necessary evil to achieve some end.<sup>35</sup>

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<sup>32</sup>Ibid., p. 285.

<sup>33</sup>Ibid.

<sup>34</sup>Dewey, Interest and Effort in Education, op. cit.

<sup>35</sup>Dewey, How We Think, op. cit., p. 285.



## Art

Dewey has a number of definitions and descriptions of art, but the one which seems to give the most meaning within the context of the continuum of active occupations is the following:

Art is a quality of doing and of what is done. Only outwardly, then can it be designated by a noun substantive. Since it adheres to the manner and content of doing, it is adjectival in nature.<sup>36</sup>

In other words, art is an intrinsic quality of activity. Dewey views life as a process of doing and undergoing and art as a quality of this process. Art then may be characteristic of the common experiences of life. Dewey rejects the notion that "real" art is somewhere divorced from ordinary experience.<sup>37</sup>

The actual nature of the quality of an experience cannot be put into words according to Dewey. This esthetic quality of experience is concrete and existential, and hence it varies with individuals. Because the quality of an experience is unique to each individual and to each experience, it cannot be put into language.<sup>38</sup> There are, however, certain characteristics by which the artistic qualities of an experience can be designated.

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<sup>36</sup>John Dewey, Art As Experience (New York: Minton, Balch & Company, 1934), p. 214.

<sup>37</sup>Ibid., pp. 3, 11.

<sup>38</sup>Ibid., p. 215.





Art is a fusion in one experience of the pressure upon the self of necessary conditions and the spontaneity and novelty of individuality.<sup>39</sup>

A quality of experience seems to include a certain attitude of seriousness or compulsion and also of freedom. Art in this sense is a harmony of mental playfulness and seriousness.<sup>40</sup> A further insight into Dewey's meaning of the fusion or harmony of these two attitudes is provided by the following statement:

In art, the playful attention becomes interest in the transformation of materials to serve the purpose of a developing experience.<sup>41</sup>

Involved in this attitude is a serious absorption in an orderly process of manipulating materials for certain desired purposes. The artistic ideal then is not merely fanciful thinking, but it recognizes the necessity of action, of doing something. Also involved in this attitude is the unconstrained character of the experience, the playfulness. This playfulness involves interest in the process of doing something as well as in the anticipated result of the doing.

#### Work, Play and Art Related

The continuum of active occupations is now complete; the moments or parts of the continuum are finally related in a definition which defines art in terms of both work and play:

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<sup>39</sup>Ibid., p. 281.

<sup>40</sup>Dewey, How We Think, op. cit., p. 287.

<sup>41</sup>Dewey, Art As Experience, op. cit., p. 279.



Work is psychologically simply an activity which consciously includes regard for consequences as a part of itself; it becomes constrained labor when the consequences are outside of the activity as an end to which activity is merely a means. Work which remains permeated with the play attitude is art--in quality if not in conventional designation.<sup>42</sup>

In other words, both the playfulness of play and the seriousness of work contribute to a proper view of art. Also implied in the above statements is that art may become a part of common experience, in this case, the common work experiences. It seems then that a work experience has an esthetic character when freedom to select the means to achieve ends is allowed, when there is absorption or interest in the means or the process itself, and when an activity is fulfilled. Donohue provides an interesting account of this relation between work, play and art:

Work, indeed, came first and devised operational methods. But when play borrowed this methodology, it did not have to concentrate on the goal with such business-like intensity. It discovered the joy in the activity itself and could return this insight to labor. Art is nothing more than work permeated with the play attitude, so that not only the product but also the process is inherently enjoyable. For occupations can be congenial if this pattern of beginning, sequence and climax is understood.<sup>43</sup>

It seems then that Dewey succeeds in relating work, play and art in such a way that no oppositions arise and that no sharp differentiations are involved.

#### Educational Implications of Dewey's Concept of Work

It was stated earlier that Dewey thinks that the concepts of work,

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<sup>42</sup>Dewey, Democracy and Education, op. cit., p. 206.

<sup>43</sup>Donohue, op. cit., p. 91.





play and art have significant educational implications. The remaining part of this chapter will deal with these educational implications; however, the relevance of Dewey's concept of work to education will receive major emphasis since that is the direct purpose of this thesis.

Dewey develops and differentiates the several aspects of his genus of active occupations because, he argues, human learning occurs only in conjunction with human activity. People learn by doing.<sup>44</sup> He thus asserts that "knowledge-getting should be an outgrowth of activities having their own end, instead of a school task."<sup>45</sup> The school errs when it imposes upon children a ready-made course of studies. Children in that case follow the ends which are pre-established by school authorities; no room is permitted for the student to determine the task of education. Dewey contends that learning should start from the experience and capabilities of learners since it provides the most productive approach to education.

Modern psychology has substituted for the general, ready-made faculties of older theory a complex group of instinctive and impulsive tendencies. Experience has shown that when children have a chance at physical activities which bring their natural impulses into play, going to school is a joy, management is less of a burden, and learning is easier.<sup>46</sup>

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<sup>44</sup>Kingsley Price, Education and Philosophical Thought (Boston: Allyn and Bacon, Inc., 1962), p. 48.

<sup>45</sup>Dewey, Democracy and Education, op. cit., p. 195.

<sup>46</sup>Ibid., p. 194.



In other words the occasion and the conditions for learning are vital. When children engage in activities which solve problems real to them, they are in an educational environment which is most conducive to learning.

It is a mistake, according to Dewey, to introduce active occupations into the school merely to provide relief from the tedium and strain of regular school work. He has more serious intentions in view. Evidence from the study of psychology indicates to him the fundamental worth of native activities, of native tendencies to explore, to manipulate tools and materials, to construct, to give expression to joyous emotion, and so on. When school studies are prompted by these tendencies or impulses, the whole pupil is engaged; "the artificial gap between life in school and out is reduced; motives are afforded for attention to a large variety of materials and processes distinctly educative in effect, and cooperative associations which give information a social setting are provided."<sup>47</sup> Dewey's grounds then for assigning to play and active work a definite place in the curriculum are not for temporary expediency or momentary agreeableness but rather for intellectual and social development. This is the only way to secure a normal state of learning.<sup>48</sup>

The intellectual value which active work contributes to learning depends upon the method in which it is employed. If the activities only follow definite prescriptions or reproduce without modification ready-made models, they do not develop the intellect. These activities may

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<sup>47</sup>Ibid., p. 195.

<sup>48</sup>Ibid.





have increased muscular dexterity, but they do not require the perception and elaboration of ends, or they do not permit the use of judgment in selecting and adapting means to accomplish a desired end.<sup>49</sup> In other words, manual skill and technical efficiency must be subordinated to the intellectual benefits, and intellectual results are realized when perception becomes the fruit of acting upon purposes demanding attention.

Dewey also proposes another method of utilizing active occupations in education: consider them as "wholes." The intellectual factor of a whole depends upon a concern or interest. This is a qualitative matter which relies upon "the completeness of appeal made by a situation."<sup>50</sup> For example, if laboratory work consists merely in acquiring the techniques and skills of research apart from the purposes of discovery and testing which alone give it meaning, then the activity does not make a whole, but rather it becomes a series of ordered assignments calculated to secure only the mastery of certain skills and techniques. In like manner, manual training must not aim at the acquisition of isolated skills. Dewey proposes that students should learn these skills while they are engaged in the construction of a desired object rather than learn them in isolation. To grasp the completeness of a situation constitutes a whole for the purpose of the mind. Involved in this whole for Dewey is a notion of the simple and the complex. To the person approaching

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<sup>49</sup>Ibid., pp. 196, 197.

<sup>50</sup>Ibid., p. 198.



a subject for study, the simple thing is his purpose. This purpose furnishes a single meaning to the whole enterprise. The elements involved in the process of execution are the complex features of the activity. These elements are never to be isolated from the simple purpose of the activity. To separate them means that the learner does not see things in their wholes; a lack of unity and continuity in the activities results which in turn deprives the activities of intellectual results.<sup>51</sup>

Work activities in the school are ultimately justified because they promote instrumental thinking.<sup>52</sup> For example, Dewey thought that a preeminently sound method for introducing children to operational thinking was to provide them with experiences in manual training.<sup>53</sup> In manual work children use their physical organs--the eyes, hands, etc. But the activity also involves observation of materials, and continual planning and reflection, in order that the practical or executive side may be successfully carried on.<sup>54</sup> The result then of this activity is an interplay of ideas and their embodiment in action. In other words, the child has a purpose in mind which governs the whole process, or he regulates and selects the means to achieve his goal, to solve his problem.

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<sup>51</sup>Ibid., pp. 198, 199.

<sup>52</sup>John Dewey, Experience and Education (New York: The Macmillan Company, 1938), p. 105.

<sup>53</sup>Donohue, op. cit., p. 88.

<sup>54</sup>John Dewey, The School and Society (Chicago: The University of Chicago Press, 1915), p. 133.





Since manual training and similar activities include both practical and intellectual features, no reason for an opposition between theory and practice can arise. This is a fundamental reason, according to Dewey, for including such activities in the school; they maintain a balance between the intellectual and the practical phases of experience.<sup>55</sup> As it was noted earlier, Dewey wants no conflict between theory and practice or mind and body. Work activities tend to remove these oppositions in the thinking of students, if they are utilized properly in school.

Dewey proposes that active work be incorporated into the school curriculum not simply because it is an essential human activity which contributes to intellectual growth but primarily because it introduces students to the most fruitful employment of intelligence, namely to scientific inquiry.<sup>56</sup> In fact, those occupations which are best suited for educational purposes are those which embody most clearly the basic element of the scientific method. Dewey explicitly states this criteria for the selection of content for the curriculum.

The active occupations in which appliances are brought to bear upon physical things with the intention of effecting useful changes is the most vital introduction to the experimental method.<sup>57</sup>

Since work provided the model for the development of science, work activities, if properly utilized, can be a useful means to acquaint

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<sup>55</sup>Ibid.

<sup>56</sup>Dewey, Experience and Education, op. cit., pp. 105, 106.

<sup>57</sup>Dewey, Democracy and Education, op. cit., p. 202.



children with the basic components of scientific inquiry. Science to Dewey is mankind's best resource to solve the perplexing problems of life, to render life more satisfying. Since the benefits are so great and vital to human happiness, children should early begin to engage in activities which train them in the use of the scientific method.

Work activities are also significant in education from an intellectual standpoint because they involve children in the conscious employment of the means-consequence relation. In fact, Dewey argues that every child has acquaintance with this principle even before coming to school. For example, "when a child two or three years of age learns not to approach a flame too closely and yet to draw near enough to a stove to get its warmth, he is grasping and using the causal relation."<sup>58</sup> Since this causal relation is a natural aspect of every child's experience, the school merely bases its curriculum on the experience of the child when active work is made a part of school studies. This causal relation is not identified in its abstract form by children in their ordinary experiences; therefore, the purpose of active work in education is to bring them to a consciousness of this principle. Children learn this principle by organizing activities in terms of this means-consequence relation. Such intelligent activities require children to select means out of a variety of conditions that are present; then they arrange these means to reach an

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<sup>58</sup>Dewey, Experience and Education, op. cit., p. 104.





intended aim or purpose. If activities are not employed in education to introduce students to this causal relation, then Dewey considers that the activities cease to be educative because they are blind.<sup>59</sup>

An application of the laboratory idea as distinct from the apprenticeship idea guides Dewey in making work activities a vital part of the school. This laboratory idea aims at introducing students to the method of science, that instrumental passport to knowledge. The primary purpose of shops, kitchens, and so on in the school is not to provide opportunity for the acquisition of skills. The final justification for them is that they provide opportunity for the kind of activities "which lead students to attend to the relation of means and ends, and then to consideration of the way things interact with one another to produce definite effects."<sup>60</sup> The role of work activities in education then is not for job preparation. Donohue states Dewey's view on this matter:

Even when such training did begin, Dewey thought it ought to be--to use his own terms--less an apprenticeship than a laboratory for insights into the intellectual foundation, the general methods, and the humanistic values of work. Mastery of technical skills, whether they be those of a doctor, lawyer, teacher, or mechanic, would be best left to the job itself. True to this spirit, Dewey's generalized humanism of work is itself an application of the laboratory idea as distinct from the apprentice idea.<sup>61</sup>

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<sup>59</sup>Ibid., 105, 106.

<sup>60</sup>Ibid., p. 106.

<sup>61</sup>Donohue, op. cit., pp. 57, 58.



Intellectual and humanitarian values are thus more important reasons for work activities than preparation for a particular vocation. It seems evident that Dewey has very serious intentions in mind when he proposes the use of work activities in education.

Dewey proposes to have not only certain activities display this attitude of science but also to orientate the entire school in this direction. This is the ideal with which he challenged education in his day. He proposes that educators "carry the evolution of the school to a point where it becomes a place for getting and testing experience, as real and adequate to the child upon his level as all the resources of laboratory and library afford to the scientific man upon his level."<sup>62</sup> Dewey contends that the nature of the child himself demands that the school be orientated to this end, for he says, "to experiment in the sense of trying things out or to see what will happen is the most natural business of the child; it is indeed, his chief concern."<sup>63</sup>

Dewey places considerable emphasis upon the scientific method in framing education according to experience or in making activities vital to learning. In doing this he does not leave the impression that his ultimate aim is to train students in the special techniques of laboratory research. These specialized techniques have very little

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<sup>62</sup>John Dewey, "Democracy In Education," Journal of the National Education Association, 18 (December, 1929), 290.

<sup>63</sup>Ibid.





to do with his reason for emphasizing the method of science in school activities. What this emphasis means to Dewey is clear in these words:

It means that scientific method is the only authentic means at our command for getting at the significance of our everyday experiences of the world in which we live. It means that scientific method provides a working pattern of the way in which and the conditions under which experiences are used to lead ever onward and outward.<sup>64</sup>

In other words, the method of science, which is also the method of work, provides the means to solve the problems of life, to mediate ordinary experiences, to provide the only means available for human progress. This gives to the school a problem-solving function, for children should acquire at school an introduction into the genuinely fecund method of inquiry.

Dewey includes active occupations in education for social purposes as well as for intellectual purposes. These two purposes are, however, closely related since the method of science opens the door for human progress. Activities which introduce students to operational thinking provide the key to social reconstruction.<sup>65</sup> For example, "manual training is more than manual; it is more than intellectual; in the hands of any good teacher it lends itself easily, and almost as a matter of course, to development of social habits."<sup>66</sup> Experiences in cooperation

<sup>64</sup>Dewey, Experience and Education, op. cit., p. 111.

<sup>65</sup>Donohue, op. cit., p. 88.

<sup>66</sup>John Dewey, Educational Essays (Glasgow: Blackie & Son, Ltd.), p. 42.



at solving the problems of life are desirable social habits sought for in education. According to Dewey, those who understand the procedure used in work or science understand the technique for constructing the environment which effectively nourishes good men.<sup>67</sup> In this sense then the intellectual and the social or moral features are happily blended in school work.<sup>68</sup> According to Dewey the social and the moral are closely allied:

Morals is as much a matter of interaction of a person with his social environment as walking is an interaction of legs with a physical environment. . . . Morals are social.<sup>69</sup>

To introduce work activities which reproduce social situations in order to acquire social benefits is the same as seeking to acquire moral benefits. Dewey thus recommends such activities in order that students may have established the habit of intelligence, for the person who acts intelligently leads the morally best existence.<sup>70</sup>

Useful occupations also have educational significance in that they make students aware of their social heritage: they typify social situations. The fundamental common concerns of men center about those work activities necessary to preserve and to adorn life. These activities "tap instincts at a deep level; they are saturated with

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<sup>67</sup>Donohue, op. cit., p. 93.

<sup>68</sup>Dewey, Educational Essays, op. cit.

<sup>69</sup>Dewey, Human Nature and Conduct, op. cit., pp. 318, 319.

<sup>70</sup>Price, op. cit., p. 447.





facts and principles having a social quality."<sup>71</sup> For example, gardening ought not to be taught for the sake of preparing future gardeners, or as an agreeable pastime, but rather gardening affords a means to acquaint students with all the social implications of such an occupation.

It affords an avenue of approach to knowledge of the place farming and horticulture have had in the history of the race and which they occupy in present social organization. Carried on in an environment educationally controlled, they are means for making a study of the facts of growth, the chemistry of soil, the role of light, air and moisture, injurious and helpful animal life, etc. There is nothing in the elementary study of botany which cannot be introduced in a vital way in connection with caring for the growth of seeds. Instead of the subject matter belonging to a peculiar study called botany, it will then belong to life, and will find, moreover, its natural correlations with the facts of soil, animal life, and human relations.<sup>72</sup>

By engaging in these fundamental types of activity, which makes civilization what it is, students are made aware of their social heritage; they also see that their studies are not abstract but intrinsically related to life.<sup>73</sup> Students can further be led to see that work, especially the method of work, represents mankind's most creative efforts toward the goal of human progress.

### Summary

Dewey conceives man as an active being who can be understood best

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<sup>71</sup>Dewey, Democracy and Education, op. cit., p. 200.

<sup>72</sup>Ibid.

<sup>73</sup>John Dewey, "My Pedagogic Creed," Journal of the National Education Association, 18 (December, 1929), 293.



by analyzing these human activities. Work, play and art are important human activities from an educational standpoint. They form a continuum called active occupations. No oppositions between the moments of this continuum are permitted by Dewey.

Play is more of an attitude of mind than it is physical exuberance. The mental attitude in play permits the person engaged in play to be free from the physical things of play. Play is defined as an activity which is itself its own end, yet play has an end in the sense of a directing idea. This directing idea permits one activity to flow into another. The end is then more activity in the same line. Since the imagination carries the activity along, a directing idea of this sort makes play free, plastic. Interest is vital to play, and attention centers in the activity itself with some concern for ends. Play is not "fooling" or an outflow of energy with no direction or purpose.

Dewey considers that work is the most valuable active occupation. In work people are initiated into pragmatic thinking. The mental factor is thus more important in work than in play. This mental factor in work which chiefly differentiates it from play is that a remoter end in time has to be held to persistently. Work activities which are performed mechanically and thoughtlessly do not fit into Dewey's concept of work because they are not intelligently directed. Interest centers in the result of work rather than in the activity. Interest in work is thus enriched by the idea that the activity amounts to something.





Art is a quality of doing and of what is done. Art may be a quality of the common experiences in life; it is not necessarily divorced from ordinary life. The esthetic quality of an experience involves a harmony of the playfulness of play and the seriousness of work. Art is related to work and play in that art is nothing more than work permeated with play.

Active occupations have educational significance because knowledge getting is an outgrowth of human activities. Those activities which have their own end and not those imposed by the school are most fruitful in this respect. Activities are important in school both for intellectual and for social benefits. The intellectual results are of the instrumental or operational type. Work activities are important because they initiate students into the method of science, though in a rudimentary form. Work activities which demonstrate the means-consequence relation most clearly are most desirable in order to produce the best intellectual results.

Shops, kitchens and other activities aim for intellectual results, not for job preparation. Thus the laboratory idea dominates these activities more than the apprenticeship idea. According to Dewey's concept, the entire school should be viewed as a laboratory, a place for testing ideas, for the method of science or work is the only authentic means for getting at the significance of human experience and for providing a working pattern for human progress.



The social and the intellectual benefits of work activities in school are closely linked in that the method of work provides the only means for social reconstruction. Work activities also typify social situations and thus tap a deep human instinct. In this sense, work activities make students aware of their social heritage and the creative role work has played in human progress.





## CHAPTER V

### WORK -- CULTURAL OR FEUDAL?

#### Introduction

Dewey had a broad interest in life. In fact, he considered that his philosophy was adequate to embrace all spheres of human activity. This is evident in the fact that Dewey criticized and offered solutions from the viewpoint of his own philosophy to a wide range of human problems.<sup>1</sup> Among his interests was the current industrial life of his nation, the United States of America. He wrote articles in various periodicals and also included his reflections on American industrial life in a number of his books. Dewey observed certain bad tendencies in the working environment and accordingly proposed solutions.

The purpose of this chapter is to show how Dewey's concept of work functions in industry. It is within this context of industrial relations that Dewey uses the terms, "cultural" and "feudal." "Cultural" carries with it the idea of positive good. "Feudal" implies bad effects for both the individual and society. Dewey's evaluations and criticisms of industry stem from a basic value judgment of his respecting man: "the intrinsic worth of the fullest life for each individual."<sup>2</sup> This does not mean extreme individualism

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<sup>1</sup>Milton Halsey Thomas, John Dewey: A Centennial Bibliography (Chicago: The University of Chicago Press, 1962), pp. 1 - 153.

<sup>2</sup>Edward C. Moore, American Pragmatism: Pierce, James, and Dewey, (New York: Columbia University Press, 1961), p. 243.



to Dewey, for he believes that this fullest life for each individual is best realized in a democratic society.

Government, business, art, religion, all social institutions have a meaning, a purpose. That purpose is to set free and to develop the capacities of human individuals without respect to race, sex, class or economic status. And this is all one with saying that the test of their value is the extent to which they educate each individual into the full stature of his possibility. Democracy has many meanings, but if it has a moral meaning, it is found in resolving that the extreme test of all political institutions and industrial arrangements shall be the contribution they make to the all-round growth of every member of society.<sup>3</sup>

It seems then that the personal development of each of its citizens is the enduring characteristic of democracy as a way of life. This means that the individualism with which Dewey is concerned is best realized in a democratic society. That which is "cultural" contributes to this good life. That which is "feudal" does not promote the best interests of all individuals but only the interests of the few.

The first part of this chapter concerns Dewey's analysis of industrial life. Important to his analysis is the nature of society as he saw it. The American society is characterized by him as being a highly industrialized society. This view is held by him because the principal concern and activities of the American people centers in their industrial relations.<sup>4</sup> From this dominant pattern of work

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<sup>3</sup>John Dewey, Reconstruction In Philosophy (Boston: Beacon Press, 1957), p. 186.

<sup>4</sup>John Dewey, "The Need of an Industrial Education in an Industrial Democracy," Manual Training and Vocational Education, 27 (February, 1916), 409.





relations the culture of the people must be developed; however, the industrial arrangements from his viewpoint do not always promote human development, but rather they tend to stifle it. In general, Dewey proposes that industrial activities should be organized in such a way that they develop the fullest life possible for each individual in society. The last part of this chapter will deal with the role of education in solving these problems of industry. Education affords an important means to achieve this goal, but it is not thought to be the only means available.

### An Evaluation of Industrial Life

Dewey asserts that the classic view of political economy does much to give work an unsavory meaning. This classic theory holds that "labor which is the source of value signifies cost, onerous sacrifice of present consummation to attainment of later good, . . . ."<sup>5</sup> In other words, work is an activity which must be undertaken by men at a sacrifice. This sacrifice must be made in order to attain another good: the means or resources for a livelihood. Work according to this view is thought of as a burden and toilsome; work is done under compulsion and the pressure of necessity. In fact, Dewey associates this classic doctrine of work with the concept that work is due to a primeval curse.<sup>6</sup> Classic political economy then expresses the

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<sup>5</sup>John Dewey, Experience and Nature (New York: Dover Publications, 1958), p. 121.

<sup>6</sup>John Dewey, The Quest For Certainty: A Study of the Relation of Knowledge and Action (New York: Capricorn Books, 1960), p.4.



same human attitude toward work as that expressed by the account given in the Holy Bible of the fall of man due to sin:

No myth is more familiar than that which tells how labor is due to trespass of man upon divine prerogatives, an act that brought curse upon the earth and woe to man. Because of this primeval rebellion against God, men toil amid thorns to gain uncertain livelihood, and women bring forth children in pain. The tale is touching evidence that man finds it natural that nature should support his activities, and unnatural that the burden of continued and hard endeavor should be placed upon him.<sup>7</sup>

In other words, Dewey considers that one of the evils of the economic system is that its concept of labor is largely influenced by this Christian idea, which Dewey interprets as myth. Donohue, however, questions the accuracy of Dewey's interpretation on the Christian viewpoint by showing that he neglects a Genesis text which shows that man had been obliged to work even before his disobedience.<sup>8</sup> Nevertheless, Dewey's main objective is to establish a more realistic foundation for work than he observed in the economic institution of his day.

Dewey recognizes that classic political economy has set man in opposition to nature. The way out of this dualism is to view man as a part of nature.<sup>9</sup> Nature is then considered to be an ally of man, not his enemy. Accordingly, Dewey argues that the solution to the

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<sup>7</sup>Dewey, Experience and Nature, op. cit.

<sup>8</sup>John W. Donohue, Work and Education: The Role of Technical Culture in Some Distinctive Theories of Humanism (Chicago: Loyola University Press, 1959), p. 89.

<sup>9</sup>John Dewey, Human Nature and Conduct (New York: The Modern Library, 1930), pp. 11, 12.





industrial and economic perplexities of his age involve in a significant way the question of the relation of man and nature and of mind and matter. The viewpoint which separates man from nature envisions a radically different solution to the problem than does the viewpoint entertained by those who find no uncrossable gulf or fixed gap between them.

The former will inevitably look backward for direction; it will strive for a cultivated elite supported on the backs of toiling masses. The latter will have to face the question of whether work can become an instrument of culture and of how the mass can share freely in a life enriched in imagination and esthetic enjoyment.<sup>10</sup>

For Dewey then the proper philosophic foundation for man's world of work relations is to be found in nature and not in some predetermined set of values which sets man in opposition to nature. His appeal to the harmony between man and nature is stated clearly in these words:

"Naturalism" is a word with all kinds of meanings. But a naturalism which perceives that man with his habits, institutions, desires, thoughts, aspirations, ideals and struggles, is within nature, an integral part of it, has the philosophical foundation and the practical inspiration for effort to employ nature as an ally of human ideals and goods such as no dualism can possibly provide.<sup>11</sup>

According to Dewey, human values and a distinctive American culture can only issue forth from the conditions of which they are a part. This humane and characteristic culture cannot be developed on

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<sup>10</sup>John Dewey, Individualism Old and New (New York: Capricorn Books, 1929), p. 125.

<sup>11</sup>Ibid., p. 153.



top of the industrial and political substructure, but rather it must be developed out of it.<sup>12</sup> Culture has to be developed in channels where the mind is largely occupied. For these reasons Dewey asserts that an industrialized society can produce a culture in which satisfying human values result. When thought is separated from industrial activity, the dominant mode of activity for these people, nothing can result but perplexing problems due to dualisms which set man in opposition to nature.<sup>13</sup> Dewey observes that such dualisms are present in society. People do not view their work activities as a source of human value, as a means to create their culture. Such a notion seems both alien and inoperative to most people. He likewise notes that social ends and values are introduced only by way of an external addition; they are not developed out of industrial life.<sup>14</sup> When industrial life is thus exiled from the pale of higher values, it becomes "brutalized by failure to equate it as the means by which social and cultural values are realized."<sup>15</sup>

Dewey's solution to inhumane industrial conditions is to be found in a philosophy which would reconstruct and harmonize all

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<sup>12</sup>Ibid., p. 124.

<sup>13</sup>Ibid., p. 136.

<sup>14</sup>Dewey, The Quest For Certainty, op. cit., p. 283.

<sup>15</sup>Ibid., p. 282.





present beliefs that are rooted in a basic separation of man and nature and knowledge and action. Furthermore, this philosophy would also develop a system of operative ideas which are congruent with present scientific knowledge and with present scientific and industrial facilities which aims at the control of nature.<sup>16</sup>

For Dewey to propose a philosophy which views nature as an ally of human interests is not to propose a viewpoint or course of action which offers a simple panacea for the problems of the worker. A humane culture will not automatically be provided by taking this viewpoint. Concerted human effort bent on solving the problems of an industrialized society is imperative. No one person or small group of persons can humanize industrial civilization by their intellectual insights alone. The collective efforts of large numbers of intellectuals are required to wrest a humane culture from an industrial civilization. The multitude of workers likewise must share in making work cultural, for Dewey considers it impossible to develop a culture suitable to the needs of an industrial society when the multitudes are excluded.<sup>17</sup>

The principal means available for developing such a philosophy is science. Science to Dewey is the chief interpreter of social phenomena. Science renders nature more amenable to human ends. It

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<sup>16</sup>Ibid., p. 284.

<sup>17</sup>Dewey, Individualism Old and New, op. cit., pp. 138, 141, 142, 144, 133.



thus provides the means to solve the perplexing problems of existence.<sup>18</sup> Dewey claims in particular that significant changes in industrial life can be realized if the experimental habit is made a vital part of this activity. In industry as well as in other areas of life there is a discontinuity of the means-end relation. By adopting the experimental way of thinking method and means are placed upon the level of importance that has, in the past, been imputed exclusively to ends. Dewey charges that:

The present state of industrial life seems to give a fair index of the existing separation of means and ends. . . . Industrial life is correspondingly brutalized by failure to equate it as the means by which social and cultural values are realized.<sup>19</sup>

Industrial activities then must not be viewed as being merely means to some other higher good. These activities must be thought of as significant and necessary means to attain social and cultural values. Science as Dewey understands it points the way to follow in order that there be no discontinuity of the means-end relation.<sup>20</sup>

Dewey further argues that industrial activities do not promote the best interests of the individual. He supports this allegation by the fact that men must be artificially induced to work. Their

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<sup>18</sup>Dewey, Experience and Nature, op. cit., pp. 1-7.

<sup>19</sup>Dewey, The Quest For Certainty, op. cit., p. 282.

<sup>20</sup>Ibid., pp. 278-282.





work activity is not agreeable to them as he contends in the statement below:

It is "natural" for activity to be agreeable. It tends to find fulfillment and finding an outlet is itself satisfactory, for it marks partial accomplishment. If productive activity has become so inherently unsatisfactory that men have to be artificially induced to engage in it, this fact is ample proof that the conditions under which work is carried on balk the complex of activities instead of promoting them, irritate and frustrate natural tendencies instead of carrying them forward to fruition.<sup>21</sup>

Therefore, the reason for work being disagreeable and irksome is not to be found in human nature but rather in the social conditions under which work is undertaken. Man is basically attuned to labor; he naturally likes work because activity is his natural proclivity. The cause for the perplexing problems accompanying industrial work is to be found in industrial institutions which produce conditions contrary to man's natural tendencies. The more specific problems of industry and the specific proposals for their solution will follow in the succeeding pages.

It may be well to note at this time the basis for Dewey's view of the relation between man and his social institutions. According to his philosophy, human beings are constantly active due to the presence of impulse. This can be best illustrated by the behavior of the infant whose action is random and aimless.<sup>22</sup> This innate

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<sup>21</sup>Dewey, Human Nature and Conduct, op. cit., pp. 123, 124.

<sup>22</sup>Kingsley Price, Education and Philosophical Thought (Boston: Allyn and Bacon, Inc., 1963), p. 462.



impulse soon takes the form of a pattern. This patterning or channeling of impulse is called habit. "Dewey's point is that all human behavior (except perhaps for reflex action) is composed of innate impulse organized by acquired habit."<sup>23</sup> The formed habits of the organism results from its attempt to maintain an equilibrium between itself and the environment. This involves, of course, working on and interacting with the environment. "Life is a self-renewing process through action on the environment."<sup>24</sup> Hence the institutions and the environment help to determine to a large extent what the habits will be. It follows then that "social customs are not direct and necessary consequences of specific impulses, but that social institutions and expectations shape and crystalize impulses into dominant habits."<sup>25</sup> It is accordingly consistent for Dewey to claim that "man is a creature of habit, not of reason nor yet of instinct."<sup>26</sup> The trouble thus lies "in the inertness of established habit"<sup>27</sup> which, in a sense, has become institutionalized. For these reasons Dewey centers his attention

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<sup>23</sup>Ibid.

<sup>24</sup>John Dewey, Democracy and Education, (New York: The Macmillan Company, 1961), p. 2.

<sup>25</sup>Dewey, Human Nature and Conduct, op. cit., p. 122.

<sup>26</sup>Ibid., p. 125.

<sup>27</sup>Ibid.





on the evils of economic institutions rather than on man himself.

The authority structure of industry produces clear evidence to Dewey that industrial activities are largely determined by the false dualism of mind versus body. He criticizes the arrangement in industry whereby most of the workers are excluded from taking part in the management of industry. This type of social structure establishes a management class on one hand which does the creative thinking for the enterprise and a working class which blindly carries out their plans. The workers become "the 'hands' only; their hearts and brains are not engaged."<sup>28</sup> They execute plans which they have little or no part in forming and are thus ignorant of the meaning and intent of the designs of the management class. As a result of this opposition between mind and body, the minds of the workers become "warped, frustrated, unnourished by their activities--the ultimate source of all constant nurture of the spirit. The philosopher's idea of a complete separation of mind and body is realized in thousands of industrial workers, and the result is a depressed body and an empty and distorted mind."<sup>29</sup>

Dewey claims that there is some evidence to show that intellectual and moral effects will accrue to workers if they are permitted to employ their feelings and imagination as well as their muscles in

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<sup>28</sup>Dewey, Individualism Old and New, op. cit., p. 132.

<sup>29</sup>Ibid.



what they do. He is further convinced that once industry as a whole adopts a cooperative system of control rather than one which excludes the worker that:

There would be an enormous liberation of mind, and the mind thus set free would have constant direction and nourishment. Desire for related knowledge, physical and social, would be created and rewarded; initiative and responsibility would be demanded and achieved. One may not, perhaps, be entitled to predict that an efflorescence of a distinctive social culture would immediately result. But one can say without hesitation that we shall attain only the personal cultivation of a class, and not a characteristic American culture, unless this condition is fulfilled. It is impossible for a highly industrialized society to attain a widespread high excellence of mind when multitudes are excluded from occasion for the use of thought and emotion in their daily occupations.<sup>30</sup>

In other words, by sharing in the creative planning and management functions of industry, the work people do can become a primary educative and cultural force in society. Culture then will not be an additive feature to industrial life, but rather it will develop out of it.

When the control of industry resides in the management class, the thinking is done for the worker. For Dewey, thinking only occurs when there is a difficult problem to solve and one's intellectual powers are bent on finding a way out of the situation, but "wherever external authority reigns, thinking is suspected and obnoxious."<sup>31</sup> Only when the worker's intelligence is involved in

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<sup>30</sup>Ibid., pp. 132, 133.

<sup>31</sup>Dewey, Reconstruction In Philosophy, op. cit., p. 139.





the sense that the end result of his activities consciously guides and controls the means of its attainment does real interest in work result. If the work activity does not regard the consequences as a part of itself, then the work becomes constrained labor and a more or less mechanical series of strains. Again, when the result of work activity is intrinsic to work itself, drudgery is avoided and a real stimulus to effort is afforded.<sup>32</sup> To exclude the worker from sharing in the control of industry is to perpetuate, according to Dewey, the traditional separation between some things as mere means and others as ends; it promotes the notion of a working and a leisure class.<sup>33</sup>

Related to Dewey's criticism of the lack of the cooperative control of industry are his pointed remarks that the profit system of industry should be reshaped.<sup>34</sup> The worker's end for which he works is his wage. This end is not intrinsic to his work activity; it is external to it and not directly related, unless work is to be viewed merely as a coercive necessity to maintain a livelihood.<sup>35</sup> When pecuniary profit is utilized as the principal inducement for work, work becomes irksome, painful and costly; such

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<sup>32</sup>Dewey, Democracy and Education, op. cit., pp. 204 - 206.

<sup>33</sup>Dewey, Experience and Nature, op. cit., pp. 368, 369.

<sup>34</sup>John Dewey, "The Economic Basis of the New Society," Intelligence In The Modern World (New York: The Modern Library, 1939), p. 428.

<sup>35</sup>Dewey, Democracy and Education, op. cit., pp. 259, 260.



emphasis on profit is responsible for identifying work with onerous labor.<sup>36</sup> Dewey further notes that work for the inventor, explorer, artist, scientific investigator, physician and teacher is not "such a burdensome sacrifice that it is engaged in only because men are bribed to act by hope of reward or are coerced by fear of loss."<sup>37</sup> The alleged need of an incentive to stir the industrial worker out of his inertness is merely due to the adverse social conditions under which work is performed.

One of the social conditions which Dewey considers to be bad is the unnatural emphasis placed upon the prospect of reward. Dewey identifies the source of this bad social environment with the idea that work becomes labor or toil:

Work then becomes labor, the consequences of some aboriginal curse which forces man to do what he would not do if he could help it, the outcome of some original sin which excludes man from a paradise in which desire is satisfied without industry, compelling him to pay for the means of livelihood with the sweat of his brow. From which it follows naturally that Paradise Regained means the accumulation of investments such that a man can live upon their return without labor.<sup>38</sup>

The only truth in this notion for Dewey is that it represents the form human impulses have taken under the influence of a specific environment. The difficulties then are not due to the aversion of human nature to serviceable action, but rather they are due to the

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<sup>36</sup>Dewey, Human Nature and Conduct, op. cit., p. 122.

<sup>37</sup>Ibid., p. 123.

<sup>38</sup>Ibid., p. 124.





historic conditions which have differentiated the work of the laborer for the wage from that of the artist, adventurer, sportsman, soldier, administrator and speculator. In another writing Dewey identifies the problems involved in the profit system and in the management of industry with the opposition between theory and practice.

The personal gap which, generally speaking isolates the intellectual worker from the wage earner is symbolic and typical of a deep division of functions. This division is the split between theory and practice in actual operation. The effects of the split are as fatal to culture on one side as on the other. It signifies that what we call our culture will continue to be, and in increased measure, a survival of inherited European traditions, and that it will not be indigenous.<sup>39</sup>

In other words, the worker should not be viewed merely as a wage earner, but his intelligence should actively participate in shaping the process. Then work can become a conscious cultural force for the enrichment of mankind.

Technological advances demonstrate to Dewey both their good and their bad influences. The good influence of controlling the world of change and uncertainty for the good of mankind is somewhat nullified by the manner in which the new machines of production reduce human work to a mechanical and servile level.<sup>40</sup> This

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<sup>39</sup>Dewey, Individualism Old and New, op. cit., p. 142.

<sup>40</sup>Dewey, "The Need of an Industrial Education in an Industrial Society," op. cit., p. 411.



negative influence of technology on the worker is Dewey's concern. He claims that machine industry causes human work to lose its intellectual and esthetic cast. The machine soon conquers its operator. As long as the operator has new things to do, he is learning, but the moment he has mastered his unchanging work the machine masters him; the machine's habits absorb and swallow his.<sup>41</sup> Knowledge is built into the machine, but knowledge does not characterize the activity of the worker.

Knowledge takes effect in machinery and in the minds of technical directors, but not in the thoughts of those who tend the machine.<sup>42</sup>

When knowledge is not a consequence of work activities, work becomes toil and drudgery. The worker in this case is not consciously involved in selecting the means to achieve desired ends. This choice of the means is built into the machinery leaving the worker with merely perfunctory duties to perform.

According to Dewey, there is nothing in industrial production which of necessity excludes the use of human intelligence, of creative activity.<sup>43</sup> If the worker can share in determining the ends for which he operates a machine, this will help to solve the problem. As it is, the means are cut off from the ends; he operates the machine for ends he has no share in forming. Workers do not

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<sup>41</sup>Ibid.

<sup>42</sup>Dewey, Individualism Old and New, op. cit., p. 134.

<sup>43</sup>Dewey, Human Nature and Conduct, op. cit., p. 143.





understand what they are about; they do not understand the whole process. When workers see the whole process, the mechanizing effect of machines is counteracted. In actual practice, however, the only purpose the worker sees in his work is the wage he earns. For a worker to center his attention on the pecuniary profit is to deprive work of its culturing factors.<sup>44</sup> The activity of work itself becomes cultural when this activity is seen and participated in as a whole by the worker. When the worker mechanically performs his duties, his work is not cultural but rather, toilsome. Because work and industrial production do not permit the exercise of intelligence on the part of the ordinary worker, Dewey characterizes work as being feudal. Industry can be free from these conditions of feudalism if the culturing factors of work can become a vital part of the activity.<sup>45</sup>

#### The Role of Education in Making Work Cultural

Education also plays a vital role in effecting changes in the world of work. It was pointed out in the first part of this chapter that economic and industrial institutions must be reshaped if the right conditions are to exist which make work a significant cultural force in society. In addition to these measures, the

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<sup>44</sup>Ibid., p. 144.

<sup>45</sup>Dewey, "The Need of an Industrial Education in an Industrial Society," op. cit., pp. 411 - 414.



schools are also viewed by Dewey as an important component in society to effect changes in the work activities of men. Dewey thus envisions the need of education to assist in this matter of making work cultural. The task of education within this context is to effect a change in the quality of mental disposition in such a way that the larger and more recalcitrant features of adult society are gradually modified. This change in attitude depends upon the adoption of methods designed to alter the character and mind of students. The school is only equipped to realize this kind of change--an educative change, but these efforts alone are not sufficient to change the conditions in society unless there are changes in the adult work activities. The schools then have a necessary role to play, but it must be accompanied by actual changes in the practices of adult life if the efforts of the school are to have significant effects. In order to accomplish its task, the school must reorganize itself in such a way that it becomes a model or a projection in type of the society we should like to realize.<sup>46</sup>

Dewey believes that education assists in accomplishing this task because schools are important institutions in shaping the habits of individuals and groups. For him the vital impulse of the young demand expression, but it contains within itself no

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<sup>46</sup>Dewey, Democracy and Education, op. cit., pp. 316, 317.





pattern for expression. Education in general supplies pattern to this impulse. The formal educational institutions then are one of the institutions in society which impose shape and pattern upon these impulses.

Education is the process of giving form to impulse; its goal objective is the perpetuation in all the younger generation of the society which educates.<sup>47</sup>

In other words, society perpetuates itself by means of education. This education occurs in the total system of social institutions within a given society. The school is but one of the many institutions involved in this process of shaping impulses.

Educational institutions are not merely intended to perpetuate society as it is, but they also provide a means by which society improves itself. How do schools function to improve society from Dewey's viewpoint? Education is viewed by Dewey as an instrument of communication among the various groups of society. In this sense education is a problem-solving process. The laborer has the same basic problems as others in society, and all meet together in the school environment to learn about their rights and responsibilities in a cooperative atmosphere, a democratic atmosphere.<sup>48</sup> Schools which foster democracy are therefore needed in order to make the spirit of democracy permeate industrial life.

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<sup>47</sup>Price, op. cit., p. 465.

<sup>48</sup>Mark Starr, "Organized Labor and the Dewey Philosophy," John Dewey: Philosopher of Science and Freedom (New York: The Dial Press, 1950), p. 187.



If schools do this, they further the development of an industrial democracy rather than an industrial feudalism.<sup>49</sup> The schools, of course, have to be reconstructed if they are to be useful in developing an enlightened social order. This reconstruction becomes all the more imperative since the existing educational institution is perpetuated and defended by those who are entrenched in command of the industrial machinery.<sup>50</sup>

The school assists in making work cultural only if its function is properly conceived. Dewey argues that all levels of education should be recognized for what they are: vocational in nature. "Contrary to the general opinion, popular education has always been rather largely vocational."<sup>51</sup> Dewey uses the term "vocational" in a very broad sense. It is what may be called general education today. He wishes to eliminate by the proper use of this concept the usual opposition and distinction between cultural and industrial education or liberal and vocational education. All education is a preparation for life in the adult world. Dewey wishes to call this preparation for life "vocational." He claims that even the elementary educational scheme of his day is a scheme of

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<sup>49</sup>Dewey, "The Need of an Industrial Education in an Industrial Society," op. cit., pp. 409, 411.

<sup>50</sup>Dewey, Democracy and Education, op. cit., p. 319.

<sup>51</sup>John Dewey, "Learning to Earn: The Place of Vocational Education in a Comprehensive Scheme of Public Education," School and Society, 5 (March 24, 1917), 331.





vocational education, but, a poor one. He asserts that the main factor in selecting materials of study and in fixing methods are determined by whether they give the learner ability to add to the earnings of others but not his own earnings and his own happiness. For example, he charges business men with putting undue pressure on the school to keep to the business of teaching the 3 R's because this makes the students useful to the business world. Business men accordingly attack any enrichment of the curriculum which does not lend itself to narrow economic ends. Thus the real issue to Dewey is not whether the schools will be vocationally orientated; the real issue is what sort of an industrial education there should be and whose interests should be primarily considered in its development. To claim that elementary education, for example, is liberal and not vocational is to perpetuate a false idea of what the school is actually doing. For these reasons, Dewey repeatedly attacks the false division between the liberal and the mechanical arts.<sup>52</sup> Both aspects are viewed as vocational education to Dewey, but good vocational education does not foster this opposition.

The first step then in the reconstruction of schools is to view the entire scheme of popular education as vocational in the broad sense. The next step is to determine whose interests should be

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<sup>52</sup>Starr, op. cit., p. 191.



primarily considered. Dewey's rejection of the dominance of the industrialist's interests is sharply stated:

Any scheme for vocational education which takes its point of departure from the industrial regime that now exists, is likely to assume and to perpetuate its divisions and weaknesses, and thus to become an instrument in accomplishing the feudal dogma of social predestination.<sup>53</sup>

To accept the position of the industrialist means to Dewey to split the system, to give to the less fortunately situated an education conceived mainly as specific trade preparation and on the other hand to provide a liberal education for the ruling or leisure class. The school then becomes "an agency for transferring the older division of labor and leisure, culture and service, mind and body, directed and directive class, into a society nominally democratic."<sup>54</sup>

Dewey's point of departure for the reconstruction of the schools is his idea of a liberal or cultural occupation which provides all youth with directive power to shape to some extent the social ends of work and their future.<sup>55</sup> This foundation for the popular schools is intrinsically linked to Dewey's concept of vocation. "A vocation signifies any form of continuous activity which renders service to others and engages personal powers in behalf of the accomplishment

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<sup>53</sup>Dewey, Democracy and Education, op. cit., p. 318.

<sup>54</sup>Ibid.

<sup>55</sup>Ibid.





of result."<sup>56</sup> This new definition of vocation is necessitated by the entanglement of ordinary vocational education with such philosophic dualisms of labor versus leisure, theory versus practice, body versus mind, and mental state versus the world.<sup>57</sup> Dewey places a couple of qualifications on his meaning of vocation so that it will avoid the usual limitations of vocation to occupations where immediately tangible commodities are produced.

In the first place, each individual has of necessity a variety of callings, in each of which he should be intelligently effective; and in the second place any one occupation loses its meaning and becomes a routine keeping busy at something in the degree in which it is isolated from other interests.<sup>58</sup>

In other words, vocation has a broad meaning and covers such activities as being a father in a home. Thus the key to the educational situation lies in the utilization of various forms of occupation typifying social callings and in bringing out their intellectual and moral content.<sup>59</sup>

To Dewey, the real issue that is commonly raised between a liberal versus a vocational type of education requires a decision as to "whether intelligence is best exercised apart from or within activity which puts nature to human use, and whether individual culture is best secured under egoistic or social conditions."<sup>60</sup> Dewey, of course, holds

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<sup>56</sup>Ibid., p. 319.

<sup>57</sup>Ibid., p. 306.

<sup>58</sup>Ibid., p. 307.

<sup>59</sup>Ibid., p. 315.

<sup>60</sup>Ibid., p. 320.



that intelligence is best exercised within activity which puts nature to human use. Education then is intended to prepare people to enter the world of work in such a way that their work will become cultural; work will become an activity which fosters the exercise of human intelligence.

### Summary

Dewey is critical of the conditions under which human work was carried out in his day. He offers solutions which are consistent with his philosophic outlook. In general, these aggravating industrial conditions can be resolved by a reconstruction of the industrial institution in such a way that it re-enforces human efforts to attain excellence. The educational institution complements this reform only by reorganizing its outlook and practices.

Dewey describes his society as an industrial society because this is their dominant mode of activity. This industrial society has accepted uncritically the classic view of political economy. This theory views work as costly, toilsome and as the result of a primeval curse. To Dewey, this concept sets man in opposition to nature. The opposite should be the case: nature should be considered an ally of man, not his enemy. With this opposition as the dominant pattern of work relations, work can never become a culturing feature in society. Dewey claims that a distinctive and humane culture can come forth from man's industrial activities. Culture has to come out of these activities and not simply be constructed on top of them. To Dewey





culture develops in the channels where the mind is largely occupied; therefore, this means for an industrialized society that their culture must develop in their industrial activities.

The solution for Dewey is found in a philosophy which sees no separation between man and nature. This philosophy is to be congruous with science; in fact, science points the way to achieve the greatest harmony between man and nature. Such a philosophy and its application requires the collective intelligence of both the intellectuals and the workers. Only by such cooperative efforts can nature be guided to new possibilities.

If work is disagreeable, the fault for this is to be found in the conditions of work and not in man himself. It was the historic conditions of industry which made work a burden and not a joy. To make work a pleasurable and cultural experience these industrial conditions must be reconstructed. Since man is a creature of habit and these habits take particular form by means of institutions, the solution to disagreeable working conditions must be found in the institution and not in man.

Dewey proposes in particular that the authority structure of industry should be revised. In industry the worker is the "hands" only; their hearts and brains are not engaged. The worker should share in the control of industry; otherwise, the opposition of a working and leisure class is fostered.

Schools assist in the task of making work cultural and of freeing it from feudalistic tendencies only if they are properly conceived



and operated. All popular schooling is vocational in a broad sense to Dewey so that the issue is not whether there will be vocational education but what sort of vocational education and whose interests are to be served in the process. To build from the point of departure of the industrialist, means utilizing the school as an agency for fostering the older division of labor and leisure, mind and body, theory and practice. Dewey would reconstruct the schools so that they provide youth with the directive power to shape the conditions of work to some extent. The key to reforming the schools lies in utilizing occupations typifying social callings and in bringing out their intellectual and moral content.

The heart of the issue between these opposing conceptions of the function of the school requires a decision as to whether intelligence is best exercised apart from or within activity which puts nature to human use. For Dewey intelligence is best exercised within such activity. In this way, human work fosters the exercise of human intelligence and promotes human excellence; this decision is necessary if work is to become cultural and not feudal.





## CHAPTER VI

### EVALUATION

#### Introduction

Two attempts at analysis comprise the burden of this concluding chapter. In the first place an attempt is made to analyze a certain vocational education program by using the findings of this thesis as the criteria of judgment. Lastly, this author's personal reflections on the value and on the shortcomings of Dewey's theory of work and its relevance to education are advanced.

#### Dewey and Canadian Vocational Education

The vocational program which I have chosen to consider in terms of Dewey's conception of work is the technical and vocational training program which is currently under the sponsorship of the federal government. This program came into existence and became law with the adoption by the federal government of the "Technical and Vocational Training Assistance Act, Bill C-49" in December, 1960.<sup>1</sup> It is an act whereby the federal and the provincial governments share in the cost and in the control of this particular kind of educational program. Only the stated purposes or goals of this program will be dealt with in this chapter.

The aims of this program of technical and vocational training are succinctly expressed in the text of the Act itself:

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<sup>1</sup>Statutes of Canada, 1960-61, 9-10 Elizabeth II, Volume I, pp. 37 - 43.



- (d) "technical and vocational training" means any form of instruction the purpose of which is to prepare a person for gainful employment in any primary or secondary industry or in any service occupation or to increase his skill or proficiency therein, and, without restricting the generality of the foregoing, includes instruction for that purpose in relation to any of the following industries or occupations:
- (i) agriculture,
  - (ii) fishing,
  - (iii) forestry,
  - (iv) mining,
  - (v) commerce,
  - (vi) construction,
  - (vii) manufacturing,
  - (viii) transportation or communication, or
  - (ix) generally, any primary or secondary industry or service occupation requiring an understanding of the principles of science or technology and the application thereof, except where such instruction is designed for university credit;<sup>2</sup>

The aim of this federal program of technical and vocational training is simply "to prepare a person for gainful employment" in the world of work, or "to increase his proficiency therein." Job preparation or upgrading is thus the major concern of this program. There is apparently no specific restriction upon the type of occupation for which training may be offered. There may be a hint as to which occupations are most worthy of this specialized training in Section (ix) above where it says, "occupation requiring an understanding of the principles of science or technology and the application thereof." This statement seems to indicate that those occupations which require a certain amount of scientific and technological knowledge for their

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<sup>2</sup>Ibid., pp. 37, 38.





successful performance are the chief concern of this training program. The government obviously considers Canada to be a highly industrialized nation and that specialized schools must be established which are in harmony with the existing and future patterns of employment. It thus seems that the goal for the individual student in these schools is to acquire sufficient knowledge and skill in order to gain employment in a particular occupation.

From Dewey's viewpoint these goals would not be entirely satisfactory, for he would insist upon a much broader kind of training. I believe that Dewey would propose that the excellence and happiness of the worker should be the stated general aim of such an educational program. This government program aims only at excellence in job preparation. This seems to mean that specific knowledge and skills are acquired in order to perform well some particular occupation. This would not be the most important part of the program from Dewey's viewpoint. In fact, Dewey is not always thinking of such advanced vocational schools when he discusses vocational education. Many of his remarks are directly applicable to elementary and secondary levels. On these levels it seems clear that he would eliminate all training in specific skills and knowledge. He seems to prefer that the teaching of all such skills should be done by industry itself. Industry has, however, reached such a state of advanced technology today that this proposal made several decades ago seems inadequate. I am assuming, however, that some kind of specialized training would be



recommended by him, but the goals of such a vocational training program would have to be much broader.

To be more specific regarding the need for broader goals, it seems certain that Dewey would propose training in the broader social and intellectual aspects of an occupation. These broad goals would not be considered as a feature of the program separate from the acquisition of specific knowledge and skill, but both should fuse into one whole and complement each other. The intent of this broader kind of training would be to provide the worker with sufficient social and intellectual knowledge of his chosen vocation so that he will be able to share in the control of industry and also to determine to some extent the future of his occupation. In this way the worker would be prepared to become a significant agent in determining the ends of industrial production. Dewey recognizes the need for managers and experts in industry, but he believes that the best interests of all are served by a democratic rather than a feudalistic or authoritarian control of the processes of production. Such democratic control of industry means that the intelligence of the workers must be exercised as well as that of the expert. This kind of cooperative effort will ensure the personal development of the worker through the exercise of his intelligence in solving the problems of production; it will likewise enhance democratic ways of living together. Dewey then would want broad aims for vocational education so that the work men do would be an





important means for them to create a distinctive culture, a way of life.

It must be remembered at this point that Dewey would also insist upon changes in industrial institutions if such an educational program is to be effective. In other words, Dewey's proposals envision a whole way of life; his philosophy is comprehensive. Reasonable harmony must exist among the various institutions of a given society if progress is to be realized.

No specification is made in this Act respecting the methods or the content of instruction, for it clearly states, "any form of instruction." In general, this is a wise policy in order that provinces may be permitted considerable flexibility in developing the content and the method of the curricula which are best suited to their particular situations. I believe that Dewey would in general agree with such a flexible policy, but I also believe that Dewey would propose certain philosophical guidelines for the program. Within the context of these guidelines, much latitude would be permitted. In other words, Dewey is not indifferent to the importance of method in achieving desired educational goals; methods are most important to him. He would insist that at least certain guidelines be specified regarding the method of instruction; otherwise there is no assurance that the goals of education will or can be realized.

One guideline which I believe he would specify for the method of instruction is that the process of learning should be conceived as a problem solving process. He would not favor the rote or



mechanical attainment of knowledge and skills. This method implies a narrow preparation for employment; it does not prepare a worker to participate intelligently in the larger aspects of his vocation. If the learning process is thought of in terms of problem solving, the student then would be faced with problems which are associated with his occupation and problems that should be resolved by the method of science. In this kind of learning by doing, intelligence is exercised. Furthermore, this kind of training in intelligence foreshadows the kind of activity in which people should engage in industry. The actual job a person has should involve the worker in the conscious process of solving the problems of production. The training one receives then in science and so on should aim at something broader than making technicians out of people; the training should thoroughly acquaint them with the method and purpose of science. This will enable workers to be more than narrow technicians capable of performing specified tasks; they will see that science is a means of control over nature, the best method available to cope with the problems of life.

Dewey would also propose guidelines to ensure that the student would gain some insight into the social implications of his chosen vocation. This would mean that history and other social sciences would be a necessary part of the program. Special concern would be given to the role of his chosen vocation in the past and in present society. In this way workers would become aware of the social implications of their occupations. Such training would prepare the student to share in making judgments respecting the function of his







occupation in a broader context. Workers then would be provided with the directive power to shape the conditions of their work to some extent.

In general, Dewey would be critical of this federal training program because the interests of the worker are not sufficiently guaranteed. This Act guarantees the perpetuation of an industrial regime which fosters a dualistic concept of life. Involved in this dualism is an opposition between labor and management which does not enhance a democratic way of life as Dewey conceives it. From the standpoint of the worker, such an arrangement sets man in opposition to nature. In other words, it does not permit men to employ their intelligence sufficiently in their work activities, their dominant mode of activity. If such favorable conditions existed, work activities, according to Dewey, could become a significant means in the creation of a culture suited to the highly industrialized society in which we live.

#### A Critical Analysis of Dewey's Concept of Work

The investigator's appraisal of Dewey's theory of work and its educational implications concludes this thesis. After noting several weaknesses in Dewey's theory, an evaluation of Dewey's over-all position regarding work and education will be provided.

In his treatment and critique of Greek philosophy, Dewey is rather general. He gives one the impression that Plato and Aristotle are the first and last word in Greek thought. Although Dewey refers most frequently to Plato and Aristotle, he does not identify the specific sources from which he extracts their views. This presents a problem



in verifying Dewey's interpretations. Dewey also often alludes to Greek viewpoints without reference to any specific philosopher or school of thought. Greek thought, however, does not constitute a unified whole even in its basic outlook. The Greeks produced many and diverse philosophies over a period of several centuries ranging from Thales to the Stoics and Epicureans. Dewey weakens his exposition by frequent references to Greek thought in an unqualified manner. For example, Dewey errs in alleging that the Greeks had no science. The charge may refer to Plato and Aristotle, but they do not represent the whole of Greek thinking. Did not Archimedes make important scientific discoveries? Archimedes' principle of hydrostatics survives to this day. Dewey is thus careless in his appraisal of Greek intellectual attainments.

Dewey is not entirely accurate in asserting that philosophy is a rationalization of existing social situations and institutions. The Greeks, to whom he refers as proof of this point, can also be cited to indicate the contrary. If Greek philosophy rationalized the existing social order, then why was not the concept of democracy incorporated into Greek thought? The Greeks certainly practiced a form of democracy among the ruling class in their society, but this democratic concept never found its place in Greek philosophical thought. Dewey claims too much in his assertion that philosophy is a rationalization of existing social experiences.

A contradiction is apparent in Dewey's position respecting the source of philosophy. In the first instance, Dewey argues that Greek





thought is obstructive to the development of a philosophy suitable for modern conditions. The Greeks elevated the rational and the eternal. Dewey rejects such fixity in philosophical outlook since he proposes an experimental approach to philosophy. On the other hand, Dewey insists that philosophy is a reflection of the cultural milieu. For example, he shows that the Greeks held philosophical dualisms such as theory versus practice and the rational versus the empirical. These oppositions were mere reflections of the dualisms evident in Greek social practice, namely, the laboring class versus the leisure class. Since Dewey holds both these positions, he is involved in a contradiction. He cannot contend that Greek thought has a dominating role in modern thought and at the same time adopt the viewpoint that philosophy is a rationalization of existing social situations. It thus appears inconsistent for Dewey to blame the Greeks for the persistence of these dualisms in Western thought when he holds firmly to his view respecting the source of philosophy. If a society produces a faulty philosophy, the source of error must be determined from within the social practices of that society and not just within those of another. A consistent approach to Dewey's position directs the philosopher's attention primarily to the immediate environment.

Dewey seemingly never tires of contending that Greek philosophy influences modern thought, but his argument is not convincing respecting the persistence of these dualisms in philosophy. The basic question which Dewey fails to answer satisfactorily is why did the



distinction between the object of thought and the object of the senses last so long--even to the present day? This dualism continues largely because it is a conceptual expression of reality as men have conceived it throughout history. Can we blame Greek philosophy for this when men are free to adopt or reject the various interpretations of the truth? Can we say that these distinctions persist due to a basic continuity in the social structure? This is doubtful since the social structure among Western nations has been in a state of flux to this very day. Dewey's failure to provide a cogent answer to this question may be due to the nature of his philosophy which is a philosophy of universal flux. In the opinion of this investigator, Dewey is not any nearer to the truth of the matter than were Plato and Aristotle who propounded the existence of eternal truths.

The position which Dewey holds respecting the coercive necessity of work does not reckon with the fact that work some day in the foreseeable future may not be a necessity for most people. Machines are now replacing human labor at a remarkable rate due to the rapid advances in technology. Scientists today predict the day when machines will do the work for men leaving them with much leisure. Workers may, in the not too distant future, cast aside their work-a-day chains. Dewey's theory of work only envisages a society which must labor vigorously to cope with life's demands. He does not envision a society with leisure, a society which does not wrestle with the precarious contingencies of making a living. Should the present trend continue





toward greater leisure for the masses, Dewey's concept of work would become increasingly meaningless. His viewpoint however is valuable for people who must work. According to Dewey's perspective, work is a meaningful activity if it is patterned after the experimental method. One significant result of work performed in this manner is the creation of a distinctive and humanitarian culture. Dewey thus ably shows that work activities can be pregnant with creative possibilities, but he offers little to the society whose dominant mode of activity is that of leisure. The future then demands a philosophy of leisure in order that men may create a distinctive culture suitable for such conditions.

The scientific method is the only authentic means available to solve the problem of life according to Dewey, but this investigator does not agree that science resolves moral problems. Science fails primarily in that it cannot produce or justify moral ideals. Once a moral ideal is determined science may be useful to achieve the desired end, but there is nothing in science itself which demands a particular course of action. One scientist may use atomic knowledge to advance civilization while another may use the same experimental approach to create weapons of mass destruction. It is thus the will of men which is at the root of moral problems. An effective ethic is required, but science in itself cannot effect normative principles.

The widespread use of scientific methods today results in more and more specialization of knowledge and labor. Is not this trend in opposition to Dewey's conception of a cooperative system of control



for industry? Dewey proposes that workers share in the creative planning and management of industry. He claims that there is a discontinuity of the means-end relation in industrial practices and that positive good for the individual and society will result if the experimental habit is made an essential part of this activity. Workers should participate in selecting the ends as well as the means of production in order that all may exercise their intelligence. Dewey's ideal is good in that work would be more meaningful to more people, but science, the model he proposes for the reconstruction of industrial functions, tends to direct industry in the opposite direction. Increasingly fewer men grasp the whole spectrum of production due to the demands of specialization. It is therefore impractical for Dewey to urge the adoption of the experimental method as a model for reorganizing industrial practices although it is consistent with his philosophical outlook.

Dewey's concept of work is intimately connected with his larger philosophical formulation. There are a number of examples which can be cited to illustrate the consistency and coherence of this concept with his general philosophical and educational position. Dewey's view of experience is fundamental to his philosophy. Work is accordingly described as a fundamental human experience designed to cope with the demands of existence. Work is further identified as mediated experience which is man's first step away from the precarious aspects of immediate experience. Work solves the problems of experience and is thus accompanied by an instrumental kind of knowing. The consistency of his position can be further noted in his continuum of





active occupations which have special significance for education. Work, play, and art are unified in that all are aspects of human activity. Each has a peculiar relationship to the means-ends relation but in such a way that no opposition is evident among the moments of this continuum. It may be useful to cite one more example. The relation between work and science suggests that Dewey has rightfully chosen work to be the prototype for science. Both have instrumentalities and procedures for effecting changes in nature, but those of science are more refined. Knowledge also accompanies both activities, but the knowledge of science is of a more reliable type.

This inquiry yields additional support to the acknowledged fact that Dewey is the champion of the common man. This is evident in the first place because he seeks to minimize rigid class distinctions. Every occupation is also valued for its unique contribution to the welfare of the individual as well as the welfare of society. These recommendations certainly dignify the labor of the common man and are worthy goals in view of the increasing effects of industrialization. These tendencies thwart the best interests of the individual for the sake of efficiency and economy.

A promising area of further research on this topic is apparent. Dewey's formulation of work suggests a novel approach to the history of science. His assertion that the Greeks hindered the development of an experimental science because they disparaged the instrumentalities and procedures of the worker and that the sciences flourished only when they adopted the viewpoint of the workman suggests an interpretation of the history of science worthy of serious consideration by some



historian. Dewey does not develop a history of science in detail, but he does offer sufficient examples to suggest a rewarding investigation.

Finally, this study lends no support to those who cite the influence of Dewey's educational philosophy as a primary cause for the slackness and waste in American education. In recent years Dewey's philosophy, or rather a caricature of it, has been attacked from a number of directions. It is commonly assumed that he believed that the function of education is to cater to the needs of the child and to adjust him to his environment. Dewey's theory of work does not substantiate such a sloven approach to education. In work men must intelligently come to grips with the problems of production. Dewey frowns upon a mere mechanical form of work in which the individual's mental capacities are minimized. The whole man must be involved in work in order that the work men do may become cultural and uplifting to the individual as well as to the community. The scientific method sets the pattern for work which enhances the well being of man. Dewey recommends that work activities be a vital part of the school to achieve the above goals. Work activities introduce children to the method of science in its most rudimentary and yet meaningful form. The exercise of intelligence must accompany these school enterprises if they are to receive Dewey's endorsement. Students must actively and consciously solve real problems in these activities. This approach of Dewey's then does not cater to students but places exacting demands upon them. Rather than Dewey's perspective aiming at adjusting students to their environment, it requires them to reshape it and to look at it critically. Dewey attempts to remove all rigidity





in educational outlook so that the student views the world as a challenge and education as a problem solving process. Dewey is never satisfied with aimless education, but he argues for a continuous process of reconstruction in which there is a progressive movement away from the child's immature immediate experience to experience which becomes more pregnant with meaning, more systematic and ordered.



## BIBLIOGRAPHY

- Dewey, John. Art As Experience. New York: Minton, Balch & Company, 1934. 355 pp.
- \_\_\_\_\_. Democracy and Education. New York: The Macmillan Company, 1961. 378 pp.
- \_\_\_\_\_. "Democracy In Education," Journal of the National Education Association, 18 (December, 1929), pp. 287-290.
- \_\_\_\_\_. "The Economic Basis of the New Society," Intelligence In The Modern World. New York: The Modern Library, 1939. pp. 416-433.
- \_\_\_\_\_. Educational Essays. Glasgow: Blackie & Son, Ltd., no date. 168 pp.
- \_\_\_\_\_. Essays In Experimental Logic. Chicago: The University of Chicago Press, 1916. 444 pp.
- \_\_\_\_\_. Experience and Education. New York: The Macmillan Company, 1938. 116 pp.
- \_\_\_\_\_. Experience and Nature. New York: Dover Publications Inc., 1958. 443 pp.
- \_\_\_\_\_. How We Think. Boston: D.C. Heath & Co., 1910. 224 pp.
- \_\_\_\_\_. Human Nature and Conduct. New York: The Modern Library, 1930. 336 pp.
- \_\_\_\_\_. Individualism Old and New. New York: Capricorn Books, 1929. 171 pp.
- \_\_\_\_\_. Interest and Effort in Education. Boston: Houghton Mifflin Company, 1913. 101 pp.
- \_\_\_\_\_. "Learning To Earn: The Place of Vocational Education in a Comprehensive Scheme of Public Education," School and Society, 5 (March 24, 1917), pp. 331-335.
- \_\_\_\_\_. Logic: The Theory of Inquiry. New York: Henry Holt and Company, 1938. 546 pp.
- \_\_\_\_\_. "My Pedagogic Creed," Journal of the National Education Association, 18 (December, 1929), pp. 291-295.





- \_\_\_\_\_. "The Need of an Industrial Education in an Industrial Democracy," Manual Training and Vocational Education, 27 (February, 1916), pp. 409-414.
- \_\_\_\_\_. The Quest For Certainty: A Study of the Relation of Knowledge and Action. New York: Capricorn Books, 1960. 318 pp.
- \_\_\_\_\_. Reconstruction In Philosophy. New York: Henry Holt and Company, 1920. 224 pp.
- \_\_\_\_\_. The School and Society. Chicago: The University of Chicago Press, 1915. 159 pp.
- \_\_\_\_\_. The School and the Child. Glasgow: Blackie & Son, Ltd., no date.
- Donohue, John W. Work and Education: The Role of Technical Culture in Some Distinctive Theories of Humanism. Chicago: Loyola University Press, 1959. 238 pp.
- Frazer, William R. "The Traditional and the Distinctive in Soviet Education," Edmund J. King, (ed.). Communist Education. Indianapolis: The Bobs-Merrill Company, Inc., 1963. Pp. 78-96.
- Monroe, Paul (ed.). A Cyclopedia of Education. 5 vols. New York: The Macmillan Company, 1911.
- Moore, Edward C. American Pragmatism: Pierce, James, and Dewey. New York: Columbia University Press, 1961. 285 pp.
- Price, Kingsley. Education and Philosophical Thought. Boston: Allyn and Bacon, Inc., 1962. 511 pp.
- Ratner, Joseph. "Dewey's Conception of Philosophy," The Philosophy of John Dewey. Evanston and Chicago: Northwestern University, 1939. Pp. 47-73.
- Starr, Mark. "Organized Labor and the Dewey Philosophy," John Dewey: Philosopher of Science and Freedom. New York: The Dial Press, 1950. Pp. 184-193.
- Statutes of Canada. 1960-61, 9-10 Elizabeth II, Volume I, pp. 37-43.
- Thomas, Milton Halsey. John Dewey: A Centennial Bibliography. Chicago: The University of Chicago Press, 1962. 370 pp.







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